

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-17-87  
Relating to Certification of New Motor Vehicles

AMERICAN MOTORS CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1986 model-year American Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
GAM1.4V5FFA3	85 (1.4)	Exhaust Gas Recirculation Three-Way Catalyst with Closed Loop (Central Fuel Injection)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per mile</u>
0.39	7.0	0.7

The following are the certification emission values for this engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.17	1.6	0.5

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2035 et seq.) and Health and Safety Code Section 43204, provided, however, that jurisdiction is hereby reserved to modify these provisions to the extent made necessary by an EPA waiver decision, in order to assure that the listed vehicles comply with the minimum federal requirements applicable in California.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 3<sup>rd</sup> day of June, 1985.



K. D. Drachand, Chief  
Mobile Source Division

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer American Motors Corporation Executive Order No. A-17-87  
 Engine Family GAM 1.4 V5 FF A3 Evaporative Family GV-1.4D-1S  
 Engine CID (Liters) 85 (1.4)

## ABBREVIATIONS:

Ignition System

CA - Centrifugal Advance  
 EEC - Electronic Engine Control  
 EI - Electronic Ignition  
 ESAC - Electronic Spark Advance Control  
 VA - Vacuum Advance  
 VR - Vacuum Retard

Exhaust Emissions Control System

AIP - Air Injection-Pump  
 AIV - Air Injection-Valve  
 CL - Closed Loop  
 EGR - Exhaust Gas Recirculation  
 EM - Engine Modification  
 OC - Oxidation Catalyst System  
 TOC - Trap Oxidizer Continual  
 TOP - Trap Oxidizer Periodical  
 TR - Thermal Reactor  
 TWC - Three-Way Catalyst System

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV - nVenturi Carburetor  
 VV - Variable Venturi

Special Features

CCV - Combustion Chamber Valve  
 CFI - Central Fuel Injection  
 DID - Diesel Injection-Direct  
 DIP - Diesel Injection-Prechamber  
 EFI - Electronic Fuel Injection  
 IC - Intercooler  
 MFI - Mechanical Fuel Injection  
 TC - Turbocharged

## VEHICLE MODELS:

93 - Encore 3-Door  
 95 - Alliance 4-Door  
 96 - Alliance 2-Door  
 99 - Encore 5-Door

DRIVE SYSTEM: Front ENGINE/ Front -WHEEL DRIVE

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars X Light-Duty Trucks      Medium-Duty Vehicles      Gas X Diesel     Manufacturer American Motors Corporation Page 2.1Engine Family GAM 1.4 V5 FF A3 Engine Code     ECS (Special Features) EGR + CL + TWC (CFI) CID (Liter) Type 85(1.4) I-4

Engine Code	Vehicle Models (If Coded See Attachment)(Hp)	Trans	Equiv. Test Weight	Ignition System ESAC Part No.	Fuel System CFI Part No.	EGR Valve Part No.	Label Ident. Part No.
5M3	93, 95, 96	M4 M5	2375	8933003663	8933003663	8933003208	8933003124
	99		2500				
5M4	93, 95, 96	M4	2250				
	99		2375				
	96	M5	2250				
	93, 95, 99		2375				
5A3	93, 95, 96	A3	2375	8933003664	8933003664		
	99		2500				
5A4	96		2250				
	93, 95, 99		2375				

Comments: Page and codes added under Running Change 86BV1.4-08.

(See Page 1 for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.)

Note: Add 10% to dyno test HP for air conditioning usage.

Date of Issue:

ENGINE FAMILY: GAM 1.4 V5 FFA3

1986 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

MARCH 25, 1985

VEHICLE	TOTAL WT.	AILE WT.	TEST WT.	ENG	TRAN	FRONTAL AREA HORSEPOWER				TIRES SHOWN		ROADLOAD HP. & COASTDOWN TIMES						
						BIAS TIRE		RADIAL TIRE		Standard tire listed 1st		Optional tires also listed		PRESSURE	(sec)	AC Hp	(sec)	Hp
						A/C	MON	A/C	MON	SIZE/MODEL	FR	RR	mo AC					
ALLIANCE 95 4-DOOR  (12093)	2006	1201	2250	1.4L	M4					P155/60R13 VIVA	30	30			12.60	6.5		
										P175/70R13 XA4					12.85	7.2		
										P175/70R13 CORSA					12.11	7.0		
										P185/60R14 EAGLE	28	28			10.65	7.6		
										P185/60R14 MXV	28	28			11.85	7.6		
(12109)	2053	1233	2375	1.4L	M5					P155/60R13 VIVA	30	30	12.57	7.2	13.22	6.5		
										P175/70R13 XA4			12.46	7.9	13.10	7.2		
										P175/70R13 CORSA			11.99	7.7	12.64	7.0		
										P185/60R14 EAGLE	28	28	10.45	8.4	11.02	7.6		
										P185/60R14 MXV	28	28	10.76	8.4	11.35	7.6		
(12134)	2078	1257	2375	1.4L	A3					P155/60R13 VIVA	30	30	12.30	7.4	12.95	6.7		
										P175/70R13 XA4			11.20	8.0	12.90	7.3		
										P175/70R13 CORSA			11.53	7.0	12.13	7.1		
										P185/60R14 EAGLE	28	28	10.04	8.5	10.56	7.7		
										P185/60R14 MXV	28	28	10.41	8.5	10.90	7.7		



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 ENGINE  
 FAMILY: GAMI.4V5 FFA3

1984 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

MARCH 25, 1985

VEHICLE	1-4EY3					FRONTAL AREA HORSEPOWER				TIRES SHOWN				ROADLOAD HP. & COASTDOWN TIMES			
	TOTAL WT.	AXLE WT.	TEST WT.	ENB	TRAN	BIAS TIRE		RADIAL TIRE		Standard tire listed 1st		Optional tires also listed		(sec)	AC Hp	(sec)	Hp w/ AC
						A/C	NON A/C	A/C	NON A/C	SIZE/MODEL	PRESSURE						
											FR	RR					
ENCORE 93 3-DOOR	1996	1187	2280	1.4L	M4					P185/60R13 VIVA	30	30			13.67	5.8	
	[(2084)]	1244	2375	1.4L	(See NS)	Tire Data at 2375# Test Wt.											
	2033	1209	2375	1.4L	M8					P185/60R13 VIVA	30	30	13.48	6.4	14.10	6.0	
	[(2089)]	1249								P175/70R13 XA4			13.36	7.2	14.05	6.5	
										P175/70R13 CORSA			12.78	6.9	13.40	6.3	
										P185/60R14 EAGLE	28	28	11.03	7.8	11.59	7.1	
										P185/60R14 NIV	28	28	11.29	7.8	11.88	7.1	
	2057	1234	2375	1.4L	A3					P185/60R13 VIVA	30	30	12.80	6.8	13.42	6.2	
	[(2113)]	1293								P175/70R13 XA4			12.76	7.3	13.42	6.4	
										P175/70R13 CORSA			12.03	7.2	12.61	6.5	
										P185/60R14 EAGLE	28	28	10.24	8.0	10.75	7.3	
										P185/60R14 NIV	28	28	10.70	8.0	11.26	7.3	

1984 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

MARCH 25, 1985

VEHICLE	1-4E99					FRONTAL AREA HORSEPOWER				TIRES SHOWN				ROADLOAD HP. & COASTDOWN TIMES			
	TOTAL WT.	AXLE WT.	TEST WT.	ENB	TRAN	BIAS TIRE		RADIAL TIRE		Standard tire listed 1st		Optional tires also listed		(sec)	AC Hp	(sec)	Hp w/ AC
						A/C	NON A/C	A/C	NON A/C	SIZE/MODEL	PRESSURE						
											FR	RR					
ENCORE 99 5-DOOR	2049	1203	2375	1.4L	M4					P185/60R13 VIVA	30	30			14.10	6.0	
	[(2147)]	1283	2500	1.4L	M4					P175/70R13 XA4			13.78	7.2	14.05	6.5	
										P175/70R13 CORSA			13.19	6.9	13.40	6.3	
										P185/60R14 EAGLE	28	28	11.41	7.8	11.59	7.1	
										P185/60R14 NIV	28	28	11.67	7.8	11.88	7.1	
	2107	1234	2375	1.4L	M8					P185/60R13 VIVA	30	30			14.10	6.0	
										P175/70R13 XA4			13.78	7.2	14.05	6.5	
										P175/70R13 CORSA			13.19	6.9	13.40	6.3	
										P185/60R14 EAGLE	28	28	11.41	7.8	11.59	7.1	
										P185/60R14 NIV	28	28	11.67	7.8	11.88	7.1	
	[(2163)]	1293	2500	1.4L	M8					P185/60R13 VIVA	30	30	13.83	6.7			
										P175/70R13 XA4			13.78	7.2			
										P175/70R13 CORSA			13.19	6.9			
										P185/60R14 EAGLE	28	28	11.41	7.8			
										P185/60R14 NIV	28	28	11.67	7.8			
	2132	1238	2375	1.4L	A3					P185/60R13 VIVA	30	30			13.42	6.2	
										P175/70R13 XA4			13.78	7.2	13.42	6.4	
										P175/70R13 CORSA			12.41	7.2	12.61	6.5	
										P185/60R14 EAGLE	28	28	10.50	8.0	10.75	7.3	
										P185/60R14 NIV	28	28	11.26	8.0	11.26	7.3	
	[(2188)]	1318	2500	1.4L	A3					P185/60R13 VIVA	30	30	13.10	6.9			
										P175/70R13 XA4			13.17	7.3			
										P175/70R13 CORSA			12.41	7.2			
										P185/60R14 EAGLE	28	28	10.50	8.0			
										P185/60R14 NIV	28	28	11.08	8.0			