

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-17-94  
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 1987 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>
HAM1.4V5FFA4	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>
0.18	2.1	0.3

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 7<sup>th</sup> day of May, 1986.

  
K. D. Drachand, Chief  
Mobile Source Division

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer American Motors Corporation Engine Family HAM 1.4 V5 FF A4  
 Evaporative Family HV-1.4D-1S Engine Type I4  
 Engine Liters (CID) 1.4 (85)

## ABBREVIATIONS:

Ignition System

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

Fuel System

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

VEHICLE MODELS:

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

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  
 SPL - Smoke Puff Limiter or  
 Throttle Delay  
 TOC - Trap Oxidizer Continual  
 TOP - Trap Oxidizer Periodical  
 TR - Thermal Reactor  
 TWC - Three-Way Catalyst System

Special Features

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

ENGINE: FRONT X MID \_\_\_\_\_ REAR \_\_\_\_\_

DRIVE: FWD X RWD \_\_\_\_\_ 4WD FULL TIME \_\_\_\_\_ 4WD PART TIME \_\_\_\_\_

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars X Light-Duty Trucks     Medium-Duty Vehicles     Gas X Diesel    

Manufacturer American Motors Corporation Engine Family HAM 1.4 V5 FF A4

Liter (CID) 1.4 (85) Engine Type I4

Emission Control System  
(Special Features) EGR + CL + TWC (CFI)

Engine Code	Vehicle Models (If Coded See Attachment)(Hp)	Trans Type	Equiv. Test Weight	Ign. System/ECU ESAC Part No.	Fuel System CFI Part No.	EGR Valve Part No.	Catalyst Part No.
5M3	93,95,96	M4 M5	2375	8933003663	8933003663	8933003208	8933001421
	99		2500				
5M4	93,95,96	M4	2250				
	99		2375				
	95,96	M5	2250				
	93,99		2375				
5A3	95,96	A3	2375	8933003664	8933003663		
	93,99		2500				
5A4	96		2250				
	93,95,99		2375				

Comments: \_\_\_\_\_

(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.)

Date of Issue: \_\_\_\_\_

Revisions: \_\_\_\_\_

Engine Family: HAM 1.4 V5 FF A4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER  
FEBRUARY 21, 1986

VEHICLE	VEHWT1.4						TIRES SHOWN Standard tire listed 1st Optional tires also listed					ROADLOAD HP. & COASTDOWN TIMES			
	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	SIZE MODEL	PRESSURE FR RR		(%) USAGE	(SEC.)	HP.			
ALLIANCE MODEL 96 2-DOOR	2015	1237	2375	1.4L	M4 NON-SIL	YES	P155/80R13 XA4	30	30	55%	13.07	7.3			
							P155/80R13 CORSA			3%			12.92	7.5	
							P175/70R13 XA4			33%			12.46	7.9	
							P175/70R13 CORSA	7%	11.99	7.7					
							P185/60R14 EAGLE GT	28	28	2%			10.45	8.4	
	1959	1178	2250				NO	P155/80R13 XA4	30	30	69%	13.16	6.6		
								P155/80R13 CORSA			5%			13.14	6.8
								P175/70R13 XA4			20%			12.85	7.2
								P175/70R13 CORSA	5%	12.11	7.0				
								P185/60R14 EAGLE GT	28	28	1%			10.65	7.6
	2019	1242	2375	1.4L	M5	YES	P155/80R13 XA4	30	30	50%	13.07	7.3			
							P155/80R13 CORSA			2%			12.92	7.5	
							P175/70R13 XA4			38%			12.46	7.9	
							P175/70R13 CORSA	8%	11.99	7.7					
							P185/60R14 EAGLE GT	28	28	2%			10.45	8.4	
	1963	1182	2250				NO	P155/80R13 XA4	30	30	60%	13.16	6.6		
								P155/80R13 CORSA			5%			13.14	6.8
								P175/70R13 XA4			30%			12.85	7.2
								P175/70R13 CORSA	4%	12.11	7.0				
								P185/60R14 EAGLE GT	28	28	1%			10.65	7.6
	2044	1266	2375	1.4L	A3	YES	P155/80R13 XA4	30	30	50%	12.74	7.5			
							P155/80R13 CORSA			2%			12.67	7.7	
							P175/70R13 XA4			38%			12.20	8.0	
							P175/70R13 CORSA	8%	11.53	7.8					
							P185/60R14 EAGLE GT	28	28	2%			10.04	8.5	
	1988	1207	2250				NO	P155/80R13 XA4	30	30	60%	12.89	6.8		
								P155/80R13 CORSA			5%			12.85	7.0
								P175/70R13 XA4			30%			12.30	7.3
								P175/70R13 CORSA	4%	11.71	7.1				
								P185/60R14 EAGLE GT	28	28	1%			10.32	7.7

Engine Family: HAM 1.4 V5 FF A4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER  
FEBRUARY 21, 1986

VEHICLE	VEHWT1.4						TIRES SHOWN Standard tire listed 1st Optional tires also listed					ROADLOAD HP. & COASTDOWN TIMES		
	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	SIZE MODEL	PRESSURE (FR RR)		(%) USAGE	(SEC.)	HP.		
ALLIANCE MODEL 95 4-DØØR	2053	1250	2375	1.4L	M4 NON-SIL	YES	P155/80R13 XA4	30	30	55%	13.07	7.3		
							P155/80R13 CORSA			3%		12.92	7.5	
							P175/70R13 XA4			33%		12.46	7.9	
							P175/70R13 CORSA			7%		11.99	7.7	
							P185/60R14 EAGLE GT			28		28	2%	10.45
	1987	1190	2250				NO	P155/80R13 XA4	30	30	69%	13.16	6.6	
								P155/80R13 CORSA			5%		13.14	6.8
								P175/70R13 XA4			20%		12.85	7.2
								P175/70R13 CORSA			5%		12.11	7.0
								P185/60R14 EAGLE GT			28		28	1%
	2057	1254	2375	1.4L	M5	YES	P155/80R13 XA4	30	30	50%	13.07	7.3		
							P155/80R13 CORSA			2%		12.92	7.5	
							P175/70R13 XA4			38%		12.46	7.9	
							P175/70R13 CORSA			8%		11.99	7.7	
							P185/60R14 EAGLE GT			28		28	2%	10.45
	2002	1195	2250				NO	P155/80R13 XA4	30	30	60%	13.16	6.6	
								P155/80R13 CORSA			5%		13.14	6.8
								P175/70R13 XA4			30%		12.85	7.2
								P175/70R13 CORSA			4%		12.11	7.0
								P185/60R14 EAGLE GT			28		28	1%
	2082	1279	2375	1.4L	A3	YES	P155/80R13 XA4	30	30	50%	12.74	7.5		
							P155/80R13 CORSA			2%		12.67	7.7	
							P175/70R13 XA4			38%		12.20	8.0	
							P175/70R13 CORSA			8%		11.53	7.8	
							P185/60R14 EAGLE GT			28		28	2%	10.04
	2026	1220	2375				NO	P155/80R13 XA4	30	30	60%	13.44	6.8	
								P155/80R13 CORSA			5%		13.39	7.0
								P175/70R13 XA4			30%		12.90	7.3
								P175/70R13 CORSA			4%		12.13	7.1
								P185/60R14 EAGLE GT			28		28	1%

Engine  
Family: HAM 1.4 V5 FF A4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER  
FEBRUARY 21, 1986

VEHICLE	VEHWT1.4						TIRES SHOWN					ROADLOAD HP. & COASTDOWN TIMES	
	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	Standard tire listed 1st Optional tires also listed					(SEC.)	HP.
	SIZE	MODEL	FR	RR	(%) USAGE								
ALLIANCE MODEL 93 3-DOOR	2105	1266	2375	1.4L	M4 NON-SIL	YES	P155/80R13 XA4	30	30	55%	13.89	6.7	
							P155/80R13 CORSA			3%	13.71	7.0	
							P175/70R13 XA4			33%	13.36	7.2	
							P175/70R13 CORSA			7%	12.78	6.9	
							P185/60R14 EAGLE GT	28	28	2%	11.03	7.8	
	2007	1185	2250			NO	P155/80R13 XA4	30	30	69%	13.96	5.8	
							P155/80R13 CORSA			5%	13.74	6.1	
							P175/70R13 XA4			20%	13.51	6.4	
							P175/70R13 CORSA			5%	12.79	6.2	
							P185/60R14 EAGLE GT	28	28	1%	11.05	7.1	
	2007	1185	2250		M4	NO	P155/80R13 XA4	30	30	100%	13.96	5.8	
		2120	1275	2375	1.4L	M5	YES	P155/80R13 XA4	30	30	50%	13.89	6.7
P155/80R13 CORSA										2%	13.71	7.0	
P175/70R13 XA4										38%	13.36	7.2	
P175/70R13 CORSA										8%	12.78	6.9	
P185/60R14 EAGLE GT								28	28	2%	11.03	7.8	
2064		1216				NO	P155/80R13 XA4	30	30	60%	14.60	6.1	
							P155/80R13 CORSA			5%	14.43	6.4	
							P175/70R13 XA4			30%	14.05	6.5	
							P175/70R13 CORSA			4%	13.40	6.3	
							P185/60R14 EAGLE GT	28	28	1%	11.59	7.1	
2145	1300	2500	1.4L	A3	YES	P155/80R13 XA4	30	30	50%	13.60	7.0		
						P155/80R13 CORSA			2%	13.51	7.3		
						P175/70R13 XA4			38%	13.17	7.3		
						P175/70R13 CORSA			8%	12.41	7.2		
						P185/60R14 EAGLE GT	28	28	2%	10.50	8.0		
2089	1241	2375			NO	P155/80R13 XA4	30	30	60%	13.91	6.3		
						P155/80R13 CORSA			5%	13.84	6.5		
						P175/70R13 XA4			30%	13.42	6.6		
						P175/70R13 CORSA			4%	12.61	6.5		
						P185/60R14 EAGLE GT	28	28	1%	10.75	7.3		

Engine  
Family: HAM 1.4 V5 FF A4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER  
FEBRUARY 21, 1986

VEHICLE	VEHWT1.4						TIRES SHOWN Standard tire listed 1st Optional tires also listed				ROADLOAD HP. & COASTDOWN TIMES	
	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	SIZE MODEL	PRESSURE FR RR		(%) USAGE	(SEC.)	HP.
ALLIANCE MODEL 99 5-DOOR	2141	1275	2500	1.4L	M4 NON-SIL	YES	P155/80R13 XA4	30	30	55%	14.28	6.7
							P155/80R13 CORSA			3%	14.06	7.0
							P175/70R13 XA4			33%	13.78	7.2
							P175/70R13 CORSA			7%	13.19	6.9
							P185/60R14 EAGLE GT	28	28	2%	11.41	7.8
	2043	1194	2375			NO	P155/80R13 XA4	30	30	69%	14.60	6.1
							P155/80R13 CORSA			5%	14.43	6.4
							P175/70R13 XA4			20%	14.05	6.5
							P175/70R13 CORSA			5%	13.40	6.3
							P185/60R14 EAGLE GT	28	28	1%	11.59	7.1
	2157	1285	2500	1.4L	M5	YES	P155/80R13 XA4	30	30	50%	14.28	6.7
							P155/80R13 CORSA			2%	14.06	7.0
							P175/70R13 XA4			38%	13.78	7.2
							P175/70R13 CORSA			8%	13.19	6.9
							P185/60R14 EAGLE GT	28	28	2%	11.41	7.8
	2102	1225	2375			NO	P155/80R13 XA4	30	30	60%	14.60	6.1
							P155/80R13 CORSA			5%	14.43	6.4
							P175/70R13 XA4			30%	14.05	6.5
							P175/70R13 CORSA			4%	13.40	6.3
							P185/60R14 EAGLE GT	28	28	1%	11.59	7.1
	2182	1309	2500	1.4L	A3	YES	P155/80R13 XA4	30	30	50%	13.60	7.0
							P155/80R13 CORSA			2%	13.51	7.3
							P175/70R13 XA4			38%	13.17	7.3
							P175/70R13 CORSA			8%	12.41	7.2
							P185/60R14 EAGLE GT	28	28	2%	10.50	8.0
	2126	1250	2375			NO	P155/80R13 XA4	30	30	60%	13.91	6.3
							P155/80R13 CORSA			5%	13.84	6.5
							P175/70R13 XA4			30%	13.42	6.6
							P175/70R13 CORSA			4%	12.61	6.5
							P185/60R14 EAGLE GT	28	28	1%	10.75	7.3