

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-17-101
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 1988 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 Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
JAM2.OV5FGA5	1.7/2.0 (105/120)	Exhaust Gas Recirculation Three-Way Catalyst Oxygen Sensor - 1.7L Heated Oxygen Sensor - 2.0L (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>
0.16	2.4	0.4

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 1988 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 the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s] ..." (Title 13, California Administrative Code, Section 1968) 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 with Health and Safety Code Section 43204.

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 21 day of May, 1987.


K. D. Drachand, Chief
Mobile Source Division

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer American Motors Corporation Engine Family JAM 2.0 V5 FG A5
Evaporative Family JV-2.0H-1S Engine Type I-4
Engine Liters (CID) 1.7, 2.0 (105,120)

ABBREVIATIONS:

Ignition System

- CA - Centrifugal Advance
- ECU - Electronic Control Unit
- 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

Exhaust Emissions Control System

- AIP - Air Injection-Pump
- AIV - Air Injection-Valve
- DBC - Dual Bed Catalyst
- EGR - Exhaust Gas Recirculation
- EIC - Electronic Injection Control
- EM - Engine Modification
- OC - Oxidation Catalyst
- OS - Oxygen Sensor
- HOS - Heated Oxygen Sensor
- SPL - Smoke Puff Limiter or Throttle Delay
- TOC - Trap Oxidizer, Continual
- TOP - Trap Oxidizer, Periodical
- TWC - Three-Way Catalyst
- WUOC - Warm-Up Oxidation Catalyst
- WUTWC - Warm-Up Three-Way Catalyst

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
- OBD - On-Board Diagnostics
- TC - Turbocharged

VEHICLE MODELS:

- 93 = Alliance 3-Door
- 95 = Alliance 4-Door
- 96 = Alliance 2-Door
= GTA 2-Door (2.0L)
- 97 = Alliance Convertible
= GTA Convertible (2.0L)
- 99 = Alliance 5-Door

ENGINE: FRONT X MID _____ REAR _____

DRIVE: FWD X RWD _____ 4WD FULL TIME _____ 4WD PART TIME X

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars X Light-Duty Trucks Medium-Duty Vehicles Gas X Diesel Manufacturer American Motors Corporation Engine Family JAM 2.0 V5 FG A5Liter (CID) 1.7 & 2.0 (105 & 120) Engine Type I-4Emission Control System
(Special Features)EGR + OS + (HOS-2.0L) + 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.
5M1	96	M5	2500	8933002526	8933002526	8933002537	949991 944819 25100626 25056159
	97		2625				
5M2	96		2375				
	97		2625				
5M3	96		2500	8933004516	8933004516	8933004238	
	97		2625				
5M4	96		2375				
	97		2625				
5M5	96		2375	8933002495	8933002495	8933003184 17056378	
	93, 95, 99		2500				
	97		2625				
5M6	93, 95, 96		2375				
	99		2500				

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: _____

1988 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer American Motors Corporation Engine Family JAM 2.0 V5 FG A5

Liter (CID) 1.7 & 2.0 (105 & 120) Engine Type I-4

Emission Control System
(Special Features) EGR + OS (HOS-2.0L) + 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.
5M6	97	M5	2625				
5A5	93, 95, 96, 99	A3	2500	8933002494	8933002494		
	97		2625				
5A6	95, 96		2375				
	93, 99		2500				
	97		2625				

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: JAM 2.0 V5 FG A5

1985 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

APRIL 1, 1987

VEHICLE	VEHWT1.7					TIRES SHOWN Standard tire listed 1st Optional tires also listed				ROADLOAD HORSEPOWER % COASTDOWN TIMES			
	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	SIZE MODEL	PRESSURE FR RR		(%) USAGE	A/C (SEC.)	HP.	NON A/C (SEC.)	HP.
	ALLIANCE 95 4-DOOR	2161	1327	2500	1.7L	M5	P155/80R13 XA4	30	30	33%	13.28	7.3	13.99
						P155/80R13 CORSA			6%	13.25	7.6	13.98	6.9
						P175/70R13 XA4			35%	12.93	7.9	13.67	7.2
						P175/70R13 CORSA			25%	12.33	7.7	13.00	7.0
						P185/60R14 EAGLE GT	28	28	1%	10.87	8.5	11.45	7.7
	2105	1269	2375			P155/80R13 XA4	30	30	43%			13.75	6.6
						P155/80R13 CORSA			6%			13.63	6.8
						P175/70R13 XA4			30%			13.18	7.2
						P175/70R13 CORSA			20%			12.64	7.0
						P185/60R14 EAGLE GT	28	28	1%			11.02	7.6
	2190	1356	2500	1.7L	A5	P155/80R13 XA4	30	30	25%	13.13	7.6	13.87	6.9
						P155/80R13 CORSA			4%	13.07	7.8	13.83	7.1
						P175/70R13 XA4			45%	12.55	8.0	13.26	7.3
						P175/70R13 CORSA			25%	11.96	7.8	12.59	7.1
						P185/60R14 EAGLE GT	28	28	1%	10.33	8.6	10.85	7.8
	2134	1297	2375			P155/80R13 XA4	30	30	33%			13.44	6.8
						P155/80R13 CORSA			6%			13.39	7.0
						P175/70R13 XA4			35%			12.90	7.3
						P175/70R13 CORSA			25%			12.13	7.1
						P185/60R14 EAGLE GT	28	28	1%			10.56	7.7

Engine Family: JAM 2.0 V5 FG A5

1986 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

APRIL 1, 1987

VEHICLE	VEHWT 1.7+2.0					TIRES SHOWN Standard tire listed 1st Optional tires also listed					ROADLOAD HORSEPOWER & COASTDOWN TIMES			
	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	SIZE MODEL		PRESSURE FR RR		(%) USAGE	A/C (SEC.) HP.		NON A/C (SEC.) HP.	
ALLIANCE 96 2-DOOR	2115	1307	2375	1.7L	M5	P155/80R13 XA4	30	30	31%	13.07	7.3			
						P155/80R13 CORSA			6%	12.92	7.5			
						P175/70R13 XA4			35%	12.46	7.9			
						P175/70R13 CORSA			25%	11.99	7.7			
						P185/60R14 EAGLE GT	28	28	3%	10.45	8.4			
	2060	1249				P155/80R13 XA4	30	30	41%			13.75	6.6	
						P155/80R13 CORSA			6%			13.63	6.8	
						P175/70R13 XA4			30%			13.10	7.2	
						P175/70R13 CORSA			20%			12.64	7.0	
						P185/60R14 EAGLE GT	28	28	3%			11.02	7.6	
	2143	1336	2500	1.7L	A3	P155/80R13 XA4	30	30	25%	13.13	7.6	13.87	6.9	
						P155/80R13 CORSA			5%	13.07	7.8	13.83	7.1	
						P175/70R13 XA4			44%	12.55	8.0	13.26	7.3	
						P175/70R13 CORSA			25%	11.96	7.8	12.59	7.1	
						P185/60R14 EAGLE GT	28	28	1%	10.33	8.6	10.85	7.8	
	2080	1277	2375			P155/80R13 XA4	30	30	33%			13.44	6.8	
						P155/80R13 CORSA			6%			13.39	7.0	
						P175/70R13 XA4			35%			12.90	7.3	
						P175/70R13 CORSA			25%			12.13	7.1	
						P185/60R14 EAGLE GT	28	28	1%			10.56	7.7	
BTA 96 2-DOOR	2185	1350	2500	2.0L	M5	P195/50R15 SPORT XGT	30	35	100%	11.02	8.0	11.64	7.3	
	2132	1296	2375			P195/50R15 SPORT XGT	30	35	100%			11.19	7.2	
ALLIANCE 97 CITYBLE	2340	1395	2625	1.7L	M5	P155/80R13 XA4	30	30	10%	13.06	7.3			
						P155/80R13 CORSA			2%	13.76	7.6			
						P175/70R13 XA4			43%	13.53	7.9			
						P175/70R13 CORSA			30%	12.94	7.7			
						P185/60R14 EAGLE GT	28	28	15%	11.24	8.5			
	2285	1336				P155/80R13 XA4	30	30	10%			14.64	6.6	
						P155/80R13 CORSA			2%			14.51	6.9	
						P175/70R13 XA4			43%			14.30	7.2	
						P175/70R13 CORSA			30%			13.62	7.0	
						P185/60R14 EAGLE GT	28	28	15%			11.84	7.7	
	2368	1423	2625	1.7L	A3	P155/80R13 XA4	30	30	5%	13.73	7.6			
						P155/80R13 CORSA			1%	13.70	7.9			
						P175/70R13 XA4			45%	13.20	8.0			
						P175/70R13 CORSA			32%	12.52	7.8			
						P185/60R14 EAGLE GT	28	28	17%	10.76	8.7			
	2313	1365				P155/80R13 XA4	30	30	5%			14.50	6.9	
						P155/80R13 CORSA			1%			14.48	7.2	
						P175/70R13 XA4			45%			13.95	7.3	
						P175/70R13 CORSA			32%			13.13	7.1	
						P185/60R14 EAGLE GT	28	28	17%			11.30	7.9	
BTA 97 CITYBLE	2387	1420	2625	2.0L	M5	P195/50R15 SPORT XGT	30	35	100%	11.49	8.1			
	2343	1361				P195/50R15 SPORT XGT	30	35	100%			12.09	7.4	

Engine
Family: JAM 2.0 V5 FG A5

1988 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER
APRIL 1, 1987

VEHICLE	VEHWT1.7					TIRES SHOWN Standard tire listed 1st Optional tires also listed				ROADLOAD HORSEPOWER & COASTDOWN TIMES				
	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRNS	SIZE	MODEL	PRESSURE		(% USAGE	A/C (SEC.)	HP.	NON A/C	
								FR	RR				(SEC.)	HP.
ALLIANCE 93 3-DOOR	2157	1317	2500	1.7L	M5	P155/60R13 XA4		30	30	25%	14.28	6.7	15.00	6.1
						P155/60R13 CORS4				5%	14.06	7.0	14.80	6.4
						P175/70R13 XA4				37%	13.78	7.2	14.49	6.5
						P175/70R13 CORS4				25%	13.19	6.9	13.83	6.3
						P185/60R14 EAGLE GT	28	28	8%	11.41	7.8	11.98	7.1	
						P155/60R13 XA4		30	30	38%			14.60	6.1
	2102	1258	2375	1.7L	M5	P155/60R13 CORS4				5%			14.43	6.4
						P175/70R13 XA4				29%			14.05	6.5
						P175/70R13 CORS4				20%			13.40	6.3
						P185/60R14 EAGLE GT	28	28	8%			11.59	7.1	
						P155/60R13 XA4		30	30	38%			14.60	6.1
						P175/70R13 XA4				29%			14.05	6.5
ALLIANCE 99 5-DOOR	2213	1329	2500	1.7L	M5	P155/60R13 XA4		30	30	26%	14.28	6.7	15.00	6.1
						P155/60R13 CORS4				6%	14.06	7.0	14.80	6.4
						P175/70R13 XA4				38%	13.78	7.2	14.49	6.5
						P175/70R13 CORS4				26%	13.19	6.9	13.83	6.3
						P185/60R14 EAGLE GT	28	28	4%	11.41	7.8	11.98	7.1	
						P155/60R13 XA4		30	30	39%			15.00	6.1
	2158	1271	2375	1.7L	M5	P155/60R13 CORS4				6%			14.80	6.4
						P175/70R13 XA4				30%			14.49	6.5
						P175/70R13 CORS4				21%			13.83	6.3
						P185/60R14 EAGLE GT	28	28	4%			11.98	7.1	
						P155/60R13 XA4		30	30	31%			14.31	6.4
						P155/60R13 CORS4				6%			14.24	6.4
ALLIANCE 99 5-DOOR	2242	1358	2500	1.7L	M5	P155/60R13 XA4		30	30	26%	13.60	7.0	15.00	6.1
						P155/60R13 CORS4				6%	13.51	7.3	14.80	6.4
						P175/70R13 XA4				38%	13.17	7.3	14.49	6.5
						P175/70R13 CORS4				29%	12.41	7.2	13.83	6.3
						P185/60R14 EAGLE GT	28	28	1%	10.50	8.0	11.00	7.3	
						P155/60R13 XA4		30	30	31%			14.31	6.4
	2187	1299	2375	1.7L	M5	P155/60R13 CORS4				6%			13.48	6.6
						P175/70R13 XA4				36%			13.01	6.5
						P175/70R13 CORS4				26%			13.01	6.5
						P185/60R14 EAGLE GT	28	28	1%			11.00	7.3	
						P155/60R13 XA4		30	30	31%			14.31	6.4
						P155/60R13 CORS4				6%			14.24	6.4