

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-17-72
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 1984 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>
EAM1.4V5FJD5	85 (1.4)	Three-Way Catalyst with Closed Loop (Electronic Fuel Injection)

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

The following are the certification emission standards for this engine family to be listed on the window decal required by "California Assembly-Line Test Procedures for 1983 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles":

<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 the above engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.23	3.5	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 1960.15 of Title 13, California Administrative Code which includes repair or replacement of 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 Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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 22nd day of June, 1983.



K. D. Drachand, Chief
Mobile Source Control Division

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer American Motors Corporation Executive Order No. A-17-72
 Engine Family EAM 1.4 V5 FJ D5 Evaporative Family EV-1.4D-2S
 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
 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
 MFI - Mechanical Fuel Injection
 TC - Turbocharged

VEHICLE MODELS:

Alliance 95 4-Door Sedan
 96 2-Door Sedan

Encore 93 3-Door Hatchback
 99 5-Door Hatchback

DRIVE SYSTEM: Front ENGINE/ Front -WHEEL DRIVE

1984 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars X Light-Duty Trucks Medium-Duty Vehicles Gas X Diesel Manufacturer American Motors Corporation Page 2Engine Family EAM 1.4 V5 FJ D5 Engine Code --ECS (Special Features) CL, TWC (EFI) CID (Liter) Type 85(1.4)I4

Engine Code	Vehicle Models (If Coded See Attachment)	Trans	Equiv. Test Weight	Ignition System ESAC Part No.	Fuel System EFI Part No.	EGR Valve Part No.	Label Ident. Part No.
1A1	93, 95, 99	A3	2500	7700 708 688	7700 723 329	None	8933 002 026
	96	A3	2375				
1A2	93, 95, 96	A3	2375				
	99	A3	2500				
1M1	93, 95, 96	M4	2375				
	99	M4	2500				
	95, 96	M5	2375				
	93, 99	M5	2500				
1M2	93, 95, 99	M4	2375				
	96	M4	2250				
	93, 95, 96, 99	M5	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.)

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

Date of Issue:

STAFF USE ONLY
1984 MODEL YEAR CERTIFICATION REVIEW SHEET
EXHAUST/EVAPORATIVE SYSTEM AND FILL PIPE SPECIFICATION COMPLIANCE

Manufacturer AMERICAN MOTORS CORPORATION Engine Family EAM 1.4 VS FJDS
 P/C X LDT MDV Gas X Diesel LPG Eng. Code: Calif. X 49S 50S
 CID 85 Liters 1.4 Rated HP 58 @ 4200 RPM Rated Torque 75 @ 2500 RPM
 Type Cert.: 50K X 100K Evaporative Family EV-1.4D-2S Engine Type I4

Exhaust Control System (Special Features) CL, TWC (EFI)

- | | | | |
|--|-----------------------------|-------------------------------|------------------------------|
| 1 Authorized Representative | <u>01.02.00.00-1</u> | 10 Projected Sales | <u>Eng. Fam. Pg. 1010-3</u> |
| 2 Fuel, Test Equipment, Procedures and Route | <u>Sections 03,04,05</u> | 11 Veh. Description | <u>Eng. Fam. Pg. 1010-1</u> |
| 3 Warranty Statement and Parts List | <u>17.02.00.00</u> | 12 Test Veh. Info. | <u>Dur. Emts.</u> |
| 4 Maint: Cert/Req'd/Recm'd | <u>Eng. Fam. Pg. 1706-1</u> | C/O MY or C/A EF | <u>C/O C/O Evap.</u> |
| 5 Tune-Up Labels/Vacuum Hose Diag. | <u>Eng. Fam. Pg. 1707-1</u> | Zero Mile Books | <u>Attached with Request</u> |
| 6 Evap. Control System | <u>Eng. Fam. Pg. 0900</u> | Vehicle Logs | <u>For Executive</u> |
| 7 Engine Parameters | <u>Eng. Fam. Pg. 1002-1</u> | Maint. Logs and | <u>Order.</u> |
| 8 Fuel/Ignition Systems | <u>Eng. Fam. Pg. 1003</u> | Engr. Eval. | |
| 9 Exhaust Control System | <u>Eng. Fam. Pg. 1003-1</u> | 13 Evap. Bench Test Procedure | <u>13.02.00.00-1</u> |

STATEMENTS:

- | | | | |
|--|-----------------------------|---------------------------------|-------------------------------|
| 1 Gen. Std., Incr. in Em., Safety, Mtg All Req'ments | <u>See Cover Letter</u> | 1 Fill Pipe Specs. | <u>17.04.03.00-1</u> |
| 2 Prod. Veh. Same as Test Veh. | <u>17.03.01.00-1</u> | 2 Altitude A/F Requirement | <u>Eng. Fam. Pg. 1700-1.1</u> |
| 3 Suitability for 91 RON Fuel | <u>17.01.00.00-1</u> | 3 Carb. Tamperproof Requirement | <u>Eng. Fam. Pg. 1003-1</u> |
| 4 Label Durability | <u>Eng. Fam. Pg. 1707-1</u> | 4 Ck for DF, Outlier, Line Xing | <u>Eng. Fam. Pg. 1712-1</u> |
| 5 Driveability | <u>17.03.01.00-1</u> | 5 EPA Certificate | <u>N/A</u> |
| 6 Fill Pipe Access Zone | <u>17.04.01.00-1</u> | 6 Opt. 75K-Mi. Recall | |
| 7 Fill Pipe Performance | <u>17.04.01.00-1</u> | 7 Alcohol Compatible | |
| | | 8 Prem. Unleaded Fuel | <u>03.00.00.01-2</u> |
| | | 9 Cert. Preview Prog. | <u>Eng. Fam. Pg. 1702-1</u> |

PROJECTED EMISSIONS (1)

Veh. ID	Code (Displ)	Trans	Axle Ratio	ETW	RLHP	MPG City/Hwy	Test Loc.	NM HC	CO	NOx	Hwy NOx	50K Evap	50K Part
D39-38E	IA1 (85)	A3	3.56	2375	7.4	29.0/36.3	AMC	0.23	2.4	0.22	0.03	N/A	N/A
D39-34E	IM1 (85)	M5	3.87	2375	7.2	33.9/47.6	EPA	0.18	(3.5)	(0.29)	0.04	N/A	N/A
(2) SP39-63B	-	-	-	-	-	-	-	-	-	-	-	1.3	-

(1) The emis. data vehicle(s) above comply with stds of 0.39 7.0 0.7 0.93 2.0 N/A and includes deterioration factors of 1.387 1.245 1.404 1.404 0.0 N/A

Evaporative DF is the average of Vehicle DF None and Bench DF -0.09.

Remarks: (2) Vehicle SP39-63B is carryover from 1983 model year for Evaporative

4K test results only (83 Engine/Evap. family DAM 1.4 VS FGD5/DV-1.4D-2S)

Application

Processed By Z Newlin

Date 6/15/83

Reviewed By R J Kenny Date 6-21-83