

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-17-105  
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 1989 model-year American Motors Corporation emission control systems are certified as described below for gasoline-powered light-duty trucks:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
KAM242T5LND8	4.0	(242)	Exhaust Gas Recirculation Heated Oxygen Sensor Three-Way Catalyst No On-Board Diagnostics (Exempted) (Sequential 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>Loaded Vehicle</u> <u>Weight(lbs.)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0 - 3750	0.39	9.0	1.0

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

<u>Loaded Vehicle</u> <u>Weight(lbs.)</u>	<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0 - 3750	0.17	2.9	0.1

BE IT FURTHER RESOLVED: That the listed models are 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 vehicle manufacturer is certifying to the optional NOx standard by providing evidence that there are sufficient projected sales of vehicles certifying to the primary NOx emission standard, or is allowed a delay in implementation under small volume manufacturer provisions, or is allowed a delay in implementation under the "In lieu" standards, or is certifying passenger cars weighing more than 5250 lbs. loaded vehicle weight.

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 the 2 year/24,000 mile warranty provisions of 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<sup>st</sup> day of June, 1988.

  
K. D. Drachand, Chief  
Mobile Source Division

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer American Motors Corp. Engine Family KAM242T5LND8  
 Evaporative Family KT-242H-1S Engine Type I6  
 Engine Liters (CID) 4.0 (242)

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, EPFI, MPFI, SFI
- DID, DIP, HOS, OS
- nV - nVenturi Carburetor
- VV - Variable Venturi Carburetor

Exhaust Emissions Control System

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

VEHICLE MODELS:

- 75 = Wagoneer 4WD
- 77 = Cherokee 4WD 2-Door
- 78 = Cherokee 4WD 4-Door
- 73 = Cherokee 2WD 2-Door
- 74 = Cherokee 2WD 4-Door
- 63 = Comanche 4WD - Short Bed
- 65 = Comanche 4WD - Long Bed
- 64 = Comanche 2WD - Short Bed
- 66 = Comanche 2WD - Long Bed

Special Features

- CFI - Central Fuel Injection  
or Throttle Body Injection
- EPFI - Electronic Port Fuel Injection
- MPFI - Mechanical Port Fuel Injection
- SFI - Sequential Fuel Injection
- DID - Diesel Injection-Direct
- DIP - Diesel Injection-Prechamber
- TC - Turbocharged
- SC - Supercharged
- IC - Intercooler or Aftercooler
- CCV - Combustion Chamber Valve
- OBD - On-Board Diagnostics

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

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

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer American Motors Corp. Engine Family KAM242T5LND8

Liter (CID) 4.0 (242) Engine Type I6

Emission Control System  
(Special Features) EGR + HOS + TWC (SFI)

Engine Code	Vehicle Models (If Coded See Attachment)(Hp)	Trans Type	Equiv. Test Weight	Ign. System/ECU ESAC, ECU Part No.	Fuel System SFI Part No.	EGR Valve Part No.	Catalyst Part No.
1A2	73		3375				
	74, 64, 66		3500				
	77, 63		3625				
	78, 65		3750				

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: \_\_\_\_\_

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars \_\_\_ Light-Duty Trucks X Medium-Duty Vehicles \_\_\_ Gas X Diesel \_\_\_Manufacturer American Motors Corp. Engine Family KAM242T5LND8Liter (CID) 4.0 (242) Engine Type I6

Emission Control System

(Special Features) EGR + HOS + TWC (SFI)

Engine Code	Vehicle Models (If Coded See Attachment)(Hp)	Trans Type	Equiv. Test Weight	Ign. System/ECU ESAC, ECU Part No.	Fuel System SFI Part No.	EGR Valve Part No.	Catalyst Part No.
1M1	73	M5	3375	53 007 843* 53 005 429	53 003 956	53 004 867	956024 25104414
	74, 64		3500				
	77, 63, 66		3625				
	78, 65		3750				
1M2	73, 64		3375	53 007 843*			
	74, 66		3500				
	77, 78, 63		3625				
	65		3750				
1A1	73, 74, 64	A4	3500	53 007 842* 53 005 428			
	66		3625				
	77, 78, 63		3750				
	75, 65		3875				

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: \*10-11-89: FF13T. REVISE ECU, THROTTLE BODY &amp; THROTTLE POSITION SENSOR CALIBRATIONS.

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