

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-17-96-1
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 light-duty trucks:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
HAM242T5LAB4	242 (4.0)	Three-Way Catalyst Heated Oxygen Sensor Exhaust Gas Recirculation (Electronic Port 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>Equivalent Inertia Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per mile</u>
0-3999	0.39	9.0	1.0
4000-5999	0.50	9.0	1.0

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

<u>Equivalent Inertia Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0-3999	0.12	1.5	0.1
4000-5999	0.21	4.3	0.2

BE IT FURTHER RESOLVED: That the listed models in the 0-3999 equivalent inertia weight class 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, for the listed vehicles in the 0-3999 equivalent inertia weight class, 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.

This Executive Order supersedes Executive Order A-17-96 issued on July 1, 1986.

Executed at El Monte, California this 11th day of September, 1987.


K. D. Drachand, Chief
Mobile Source Division

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer American Motors Corporation Engine Family HAM 242 T5 LA B4
Evaporative Family HT-242H-1S Engine Type I6
Engine Liters (CID) 4.0 (242)

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:

75 = Wagoneer 4WD
77 = Cherokee 4WD 2 Dr. Wagon
78 = Cherokee 4WD 4 Dr. Wagon
73 = Cherokee 2WD 2 Dr. Wagon
74 = Cherokee 2WD 4 Dr. Wagon
63 = Comanche 4WD P.U. - Short Bed
65 = Comanche 4WD P.U. - Long Bed
64 = Comanche 2WD P.U. - Short Bed
66 = Comanche 2WD P.U. - Long Bed

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 _____ RWD X 4WD FULL TIME _____ 4WD PART TIME X

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars Light-Duty Trucks X Medium-Duty Vehicles Gas X Diesel Manufacturer American Motors Corporation Engine Family HAM 242 T5 LA B4Liter (CID) 4.0 (242) Engine Type I6Emission Control System
(Special Features) CL + EGR + TWC (EFI)

Engine Code	Vehicle Models (If Coded See Attachment) (Hp)	Trans Type	Equiv. Test Weight	Ign. System/ECU ESAC Part No.	Fuel System EFI, CL Part No.	EGR Valve Part No.	Catalyst Part No.
1M1	73	M5	3375	53007843* 8953 002 858 8953 005 025	8953002858 8953005025	8953003446 17087258	953305 25102763 956024 25104414 8952003452
	74,64		3500				
	75,77,78,66		3625				
	63		3750				
	65		3875				
1M2	73,74		3375				
	64		3500				
	75,77,78,63,66		3625				
	65		3750				
1A1	73,74	1A	3500	8953 002 857 8953 005 026	8953002857 8953005026		
	64,66		3625	53007842*			
	75,77,78,63		3750				
	65		3875				

Comments: Optional catalyst P/N's added under R/C 87BT2.5-09

(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: *10-25-89: FF47TC. REVISE ECU, THROTTLE
BODY & THROTTLE POSITION SENSOR CALIBRATIONS
5356g/6

040886

1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars Light-Duty Trucks X Medium-Duty Vehicles Gas X Diesel Manufacturer American Motors Corporation Engine Family HAM 242 T5 LA B4Liter (CID) 4.0 (242) Engine Type I6

Emission Control System

(Special Features) CL + EGR + TWC (EFI)

Engine Code	Vehicle Models (If Coded See Attachment) (Hp)	Trans Type	Equiv. Test Weight	Ign. System/ECU ESAC Part No.	Fuel System EFI, CL Part No.	EGR Valve Part No.	Catalyst Part No.
1A2	73	1A	3375	53007842* 8953 002 857 8953 005 026	8953002857 8953005026	8953003446 17087258	953305 25102763 956024 25104414 8952003452
	74,64		3500				
	75,77,78,66		3625				
	63		3750				
	65		3875				

Comments: Optional catalyst P/N's added under R/C 87BT2.5-09

(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: *10-25-89: FF47TC. REVISE ECU, THROTTLE BODY & THROTTLE POSITION SENSOR CALIBRATIONS.

040886

5356g/7

Engine
Family: HAM 242 T5 LA B4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

JUNE 23, 1986

VEHXJ242							TIRES SHOWN Standard tire listed 1st Optional tires also listed				ROADLOAD HP. & COASTDOWN TIMES		
VEHICLE	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	SIZE MODEL	PRESSURE FR RR		(%) USAGE	(SEC.)	HP.	
XJ MODEL 64 PICKUP 2WD	3236	1418	3500	242	M5	YES	P205/75R15 XA4	30	30	50%	12.35	13.5	
							P205/75R15 VECTOR			25%	11.56	13.6	
							P215/75R15 XMS1			10%	11.04	13.6	
							P215/75R15 WRANGLER			10%	11.36	14.0	
							P225/75R15 WRANGLER			5%	11.17	14.1	
	3177	1420	3500				NO	P205/75R15 XA4	30	30	50%	13.21	12.3
								P205/75R15 VECTOR			25%	12.31	12.4
								P215/75R15 XMS1			10%	11.73	12.4
								P215/75R15 WRANGLER			10%	12.12	12.7
								P225/75R15 WRANGLER			5%	12.07	12.8
XJ MODEL 66 PICKUP 2WD	3292	1431	3625	242	L4	YES	P205/75R15 XA4	30	30	50%	12.26	13.8	
							P205/75R15 VECTOR			25%	11.98	13.9	
							P215/75R15 XMS1			10%	11.22	14.0	
							P215/75R15 WRANGLER			10%	11.21	14.2	
							P225/75R15 WRANGLER			5%	11.56	14.3	
	3232	1432	3500				NO	P205/75R15 XA4	30	30	50%	12.86	12.4
								P205/75R15 VECTOR			25%	12.38	12.5
								P215/75R15 XMS1			10%	11.57	12.5
								P215/75R15 WRANGLER			10%	11.61	12.8
								P225/75R15 WRANGLER			5%	11.86	12.9
XJ MODEL 66 PICKUP 2WD	3340	1438	3625	242	M5	YES	P195/75R15 XA4	33	33	10%	13.22	13.4	
							P205/75R15 XA4	30	30	45%	12.58	13.5	
							P205/75R15 VECTOR			20%	11.88	13.6	
							P215/75R15 XMS1			10%	11.31	13.6	
							P215/75R15 WRANGLER			10%	11.78	14.0	
	3281	1440	3625				NO	P195/75R15 XA4	33	33	10%	14.17	12.2
								P205/75R15 XA4	30	30	45%	13.60	12.3
								P205/75R15 VECTOR			20%	12.63	12.4
								P215/75R15 XMS1			10%	12.00	12.4
								P215/75R15 WRANGLER			10%	12.62	12.7
XJ MODEL 66 PICKUP 2WD	3385	1450	3625	242	L4	YES	P195/75R15 XA4	33	33	10%	12.25	13.6	
							P205/75R15 XA4	30	30	45%	12.24	13.8	
							P205/75R15 VECTOR			20%	11.98	13.9	
							P215/75R15 XMS1			10%	11.22	14.0	
							P215/75R15 WRANGLER			10%	11.21	14.2	
	3337	1451	3625				NO	P195/75R15 XA4	33	33	10%	12.95	12.4
								P205/75R15 XA4	30	30	45%	13.26	12.5
								P205/75R15 VECTOR			20%	12.68	12.6
								P215/75R15 XMS1			10%	11.77	12.7
								P215/75R15 WRANGLER			10%	11.91	12.9
									5%	12.16	13.0		

Engine
Family: HAM 242 T5 LA B4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

JUNE 23, 1986

VEHXJ242							TIRES SHOWN Standard tire listed 1st Optional tires also listed			ROADLOAD HP. & COASTDOWN TIMES		
VEHICLE	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	SIZE MODEL	FR	RR	(%) USAGE	(SEC.)	HP.
XJ MODEL 63 PICKUP 4WD	3411	1444	3750	242	M5	YES	P205/75R15 XA4	30	30	30%	12.42	14.1
							P205/75R15 VECTOR			20%	11.80	14.2
							P215/75R15 XMS1			20%	10.92	14.2
							P215/75R15 WRANGLER			20%	11.32	14.5
							P225/75R15 WRANGLER			10%	11.66	14.6
	3352	1445	3625			NO	P205/75R15 XA4	30	30	30%	13.09	12.7
							P205/75R15 VECTOR			20%	12.25	12.8
							P215/75R15 XMS1			20%	11.38	12.8
							P215/75R15 WRANGLER			20%	11.65	13.1
							P225/75R15 WRANGLER			10%	11.68	13.2
XJ MODEL 65 PICKUP 4WD	3476	1460	3750	242	L4	YES	P205/75R15 XA4	30	30	30%	12.24	14.5
							P205/75R15 VECTOR			20%	12.13	14.4
							P215/75R15 XMS1			20%	11.21	14.4
							P215/75R15 WRANGLER			20%	11.33	14.6
							P225/75R15 WRANGLER			10%	11.73	14.6
	3417	1461	3750			NO	P205/75R15 XA4	30	30	30%	12.94	13.2
							P205/75R15 VECTOR			20%	12.75	13.1
							P215/75R15 XMS1			20%	11.91	13.1
							P215/75R15 WRANGLER			20%	12.23	13.3
							P225/75R15 WRANGLER			10%	12.46	13.3
XJ MODEL 65 PICKUP 4WD	3515	1463	3875	242	M5	YES	P195/75R15 XA4	33	33	10%	12.92	14.1
							P205/75R15 XA4	30	30	35%	12.64	14.1
							P205/75R15 VECTOR			15%	12.17	14.2
							P215/75R15 XMS1			20%	11.22	14.2
							P215/75R15 WRANGLER			15%	11.57	14.5
	3456	1465	3750			NO	P225/75R15 WRANGLER			5%	12.12	14.6
							P195/75R15 XA4	33	33	10%	13.50	12.8
							P205/75R15 XA4	30	30	35%	13.31	12.8
							P205/75R15 VECTOR			15%	12.61	12.9
							P215/75R15 XMS1			20%	11.67	12.9
XJ MODEL 65 PICKUP 4WD	3578	1478	3875	242	L4	YES	P215/75R15 WRANGLER			15%	12.06	13.2
							P225/75R15 WRANGLER			5%	12.41	13.3
							P195/75R15 XA4	33	33	10%	12.66	14.5
							P205/75R15 XA4	30	30	35%	12.67	14.6
							P205/75R15 VECTOR			15%	12.32	14.6
	3519	1479	3875			NO	P215/75R15 XMS1			20%	11.57	14.5
							P215/75R15 WRANGLER			15%	11.82	14.6
							P225/75R15 WRANGLER			5%	12.21	14.6
							P195/75R15 XA4	33	33	10%	13.26	13.2
							P205/75R15 XA4	30	30	35%	13.47	13.3
P205/75R15 VECTOR			15%	13.05	13.3							
P215/75R15 XMS1			20%	12.21	13.2							
P215/75R15 WRANGLER			15%	12.73	13.3							
P225/75R15 WRANGLER			5%	12.76	13.3							

Engine
Family: HAM 242 T5 IA B4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER
JUNE 23, 1986

VEHXJ242							TIRES SHOWN Standard tire listed 1st Optional tires also listed				ROADLOAD HP. & COASTDOWN TIMES		
VEHICLE	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	SIZE MODEL	PRESSURE FR RR		(%) USAGE	(SEC.)	HP.	
XJ MODEL 73 2-DOOR 2WD	3117	1363	3375	242	M5	YES	P195/75R15 XA4	33	33	10%	12.81	12.6	
							P205/75R15 XA4	30	30	50%	12.65	13.0	
							P205/75R15 VECTOR			25%	11.86	13.1	
							P215/75R15 XMS1			10%	11.07	13.2	
							P215/75R15 WRANGLER			5%	11.34	13.6	
	3052	1366	3375				NO	P195/75R15 XA4	33	33	20%	13.78	11.5
								P205/75R15 XA4	30	30	45%	13.58	11.8
								P205/75R15 VECTOR			20%	12.70	11.9
								P215/75R15 XMS1			10%	11.82	12.0
								P215/75R15 WRANGLER			5%	12.15	12.4
XJ MODEL 74 4-DOOR 2WD	3170	1376	3500	242	L4	YES	P195/75R15 XA4	33	33	10%	12.12	13.2	
							P205/75R15 XA4	30	30	50%	12.13	13.3	
							P205/75R15 VECTOR			25%	11.46	13.4	
							P215/75R15 XMS1			10%	10.83	13.4	
							P215/75R15 WRANGLER			5%	10.98	13.9	
	3106	1379	3375				NO	P195/75R15 XA4	33	33	20%	12.73	11.9
								P205/75R15 XA4	30	30	45%	12.82	11.9
								P205/75R15 VECTOR			20%	12.04	12.0
								P215/75R15 XMS1			10%	11.24	12.1
								P215/75R15 WRANGLER			5%	11.56	12.5
XJ MODEL 74 4-DOOR 2WD	3165	1397	3500	242	M5	YES	P195/75R15 XA4	33	33	10%	13.34	12.8	
							P205/75R15 XA4	30	30	50%	13.01	13.1	
							P205/75R15 VECTOR			25%	12.15	13.2	
							P215/75R15 XMS1			10%	11.37	13.3	
							P215/75R15 WRANGLER			5%	11.41	13.8	
	3100	1400	3375				NO	P195/75R15 XA4	33	33	10%	13.78	11.5
								P205/75R15 XA4	30	30	50%	13.58	11.8
								P205/75R15 VECTOR			25%	12.70	11.9
								P215/75R15 XMS1			10%	11.82	12.0
								P215/75R15 WRANGLER			5%	12.15	12.4
XJ MODEL 74 4-DOOR 2WD	3219	1410	3500	242	L4	YES	P195/75R15 XA4	33	33	10%	12.12	13.2	
							P205/75R15 XA4	30	30	50%	12.13	13.3	
							P205/75R15 VECTOR			25%	11.46	13.4	
							P215/75R15 XMS1			10%	10.83	13.4	
							P215/75R15 WRANGLER			5%	10.98	13.9	
	3154	1413	3500				NO	P195/75R15 XA4	33	33	10%	13.00	12.0
								P205/75R15 XA4	30	30	50%	13.00	12.1
								P205/75R15 VECTOR			25%	12.24	12.2
								P215/75R15 XMS1			10%	11.53	12.2
								P215/75R15 WRANGLER			5%	11.83	12.6

Engine
Family: HAM 242 T5 LA B4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

JUNE 23, 1986

VEHXJ242							TIRES SHOWN Standard tire listed 1st Optional tires also listed			ROADLOAD HP. & COASTDOWN TIMES			
VEHICLE	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	SIZE	MODEL	FR	RR	(%) USAGE	(SEC.)	HP.
XJ MODEL 75 4-DOOR 4WD	3385	1481	3625	242	M5	YES	P205/75R15	XA4	30	30	70%	12.66	13.6
							P205/75R15	VECTOR			30%	11.84	13.8
	3322	1483	3625			NO	P205/75R15	XA4	30	30	70%	13.63	12.4
							P205/75R15	VECTOR			30%	12.80	12.5
	3438	1494	3750	242	L4	YES	P205/75R15	XA4	30	30	70%	12.43	14.0
							P205/75R15	VECTOR			30%	11.94	14.1
	3374	1496	3625			NO	P205/75R15	XA4	30	30	70%	13.09	12.6
							P205/75R15	VECTOR			30%	12.46	12.7
XJ MODEL 77 2-DOOR 4WD	3349	1430	3625	242	M5	YES	P195/75R15	XA4	33	33	5%	12.89	13.5
							P205/75R15	XA4	30	30	35%	12.66	13.6
							P205/75R15	VECTOR			20%	11.84	13.8
							P215/75R15	XMS1			15%	10.97	13.9
							P215/75R15	WRANGLER			15%	11.42	14.2
							P225/75R15	WRANGLER			10%	11.25	14.2
	3283	1433	3625			NO	P195/75R15	XA4	33	33	5%	14.20	12.3
							P205/75R15	XA4	30	30	35%	13.63	12.4
							P205/75R15	VECTOR			20%	12.80	12.5
							P215/75R15	XMS1			15%	11.76	12.6
							P215/75R15	WRANGLER			15%	12.32	12.9
							P225/75R15	WRANGLER			10%	12.12	12.9
3404	1442	3750	242	L4	YES	P195/75R15	XA4	33	33	5%	12.30	13.9	
							P205/75R15	XA4	30	30	35%	12.43	14.0
							P205/75R15	VECTOR			20%	11.94	14.1
							P215/75R15	XMS1			15%	10.94	14.2
							P215/75R15	WRANGLER			15%	11.25	14.5
							P225/75R15	WRANGLER			10%	11.01	14.4
3340	1444	3625			NO	P195/75R15	XA4	33	33	5%	12.99	12.5	
							P205/75R15	XA4	30	30	35%	13.09	12.6
							P205/75R15	VECTOR			20%	12.46	12.7
							P215/75R15	XMS1			15%	11.52	12.8
							P215/75R15	WRANGLER			15%	11.88	13.0
							P225/75R15	WRANGLER			10%	11.78	13.0

Engine
Family: HAM 242 T5 LA B4

1987 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER

JUNE 23, 1986

VEHXJ242							TIRES SHOWN Standard tire listed 1st Optional tires also listed				ROADLOAD HP. & COASTDOWN TIMES			
VEHICLE	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	A/C USAGE	SIZE	MODEL	PRESSURE FR RR		(%) USAGE	(SEC.)	HP.	
XJ MODEL 7B 4-DOOR 4WD	3343	1431	3625	242	M5	YES	P195/75R15	XA4	33	33	5%	12.89	13.5	
							P205/75R15	XA4	30	30	35%	12.66	13.6	
							P205/75R15	VECTOR			20%	11.84	13.8	
							P215/75R15	XMS1			15%	10.97	13.9	
							P215/75R15	WRANGLER			15%	11.42	14.2	
	3278	1434	3625				NO	P195/75R15	XA4	33	33	5%	14.20	12.3
								P205/75R15	XA4	30	30	35%	13.63	12.4
								P205/75R15	VECTOR			20%	12.80	12.5
								P215/75R15	XMS1			15%	11.76	12.6
								P215/75R15	WRANGLER			15%	12.32	12.9
	3399	1443	3750	242	L4	YES	P195/75R15	XA4	33	33	5%	12.30	13.9	
							P205/75R15	XA4	30	30	35%	12.43	14.0	
							P205/75R15	VECTOR			20%	11.94	14.1	
							P215/75R15	XMS1			15%	10.94	14.2	
							P215/75R15	WRANGLER			15%	11.25	14.5	
	3335	1445	3625				NO	P195/75R15	XA4	33	33	5%	12.99	12.5
								P205/75R15	XA4	30	30	35%	13.09	12.6
								P205/75R15	VECTOR			20%	12.46	12.7
								P215/75R15	XMS1			15%	11.52	12.8
								P215/75R15	WRANGLER			15%	11.88	13.0
							P225/75R15	WRANGLER			10%	11.78	13.0	