State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-9-425
Relating to Certification of New Motor Vehicles

CHRYSLER 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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1999 model-year Chrysler Corporation exhaust emission control systems are certified as described below for light-duty trucks:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: XCRXT0287231 Displacement: 4.7 Liters (287 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Three Way Catalytic Converter
Dual Warm Up Oxidation Catalytic Converters
Dual Heated Oxygen Sensors (two)
Sequential Multiport Fuel Injection

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

The non-methane organic gas (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) LEV certification exhaust emission standards for this engine family in grams per mile are:

| Loaded Vehicle Weight (lbs.) | Miles | NMOG | CO | NOx | HCHO | CO (20°F) |
|---|---|---|---|---|---|---|
| 3751-5750 | 50,000 | 0.100 | 4.4 | 0.4 | 0.018 | 12.5 |
| | 100,000 | 0.130 | 5.5 | 0.5 | 0.023 | n/a |

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.94

The certification exhaust emission values set forth for NMOG reflect application of a 0.94 RAF for 1999 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

| Loaded Vehicle Weight (lbs.) | Miles | NMOG | CO | NOx | HCHO | CO (20°F) |
|---|---|---|---|---|---|---|
| 3751-5750 | 50,000 | 0.092 | 1.9 | 0.1 | 0.001 | 9.3 |
| | 100,000 | 0.099 | 2.7 | 0.1 | 0.002 | n/a |

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average NMOG exhaust mass emission requirements as set forth 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 under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

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" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, 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 Emission Control and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit 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 manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

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 provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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 6th day of August 1998.

John Kourklis for

R. B. Summerfield, Chief
Mobile Source Operations Division

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1999 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: Chrysler Corporation Exh Eng Fam: XCRXT0287231 Evap Fam: XCRXE0101G2H
All Eng Codes in Eng Fam: CA X 49S ____ 50S ____ AB965 ____ ORVR: YES ____ NO X
Exh Std: CA Tier-1 ____ TLEV ____ LEV X ULEV ____ SULEV ____; US EPA Tier-1 ____
Veh Class(es): PC ____ LDT1 ____ LDT2 X MDV1 ____ MDV2 ____ MDV3 ____ MDV4 ____ MDV5 ____
Single Cert Std for Multi-Class Eng Fam: N/A (Specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)
Fuel Type(s): Dedicated X Flex-Fuel ____ Dual-Fuel ____ Bi-Level ____ Gasoline X Diesel ____
CNG ____ LNG ____ LPG ____ M85 ____ Other (specify) ____
Emis Test Fuel(s): Indo ____ CBG X CNG ____ LPG ____ M85 ____ Other(specify) ____
Diesel: 13 CCR 2282 ____ or 40 CFR 86.113-90 ____ or 40 CFR 86.113-94 ____
Evaporative Emission Test Procedure: California ____ Federal X
Service Accum: Std AMA ____ Mod AMA X Mfr ADP ____ Other (Specify) ____
NMOG Test Procedure: N/A ____ Std ____ Equiv X R/L Test Proce: SHED ____ Pt Source X
Engine Configuration: V-8 Displacement: 4.7 Liters 287 Cubic Inches
Valves per Cylinder: 2 Rated HP: 230 @ 4800 RPM
Engine: Front X Mid ____ Rear ____ Drive: FWD ____ RWD X 4WD-FT ____ 4WD-PT X
Exhaust ECS (eg., EGR, MFI, TC, CAC): 2WUOC, 2HO2S(2), TWC, SFI, OBD II

(use abbreviations per SAE J1930 JUN93)

| Engine Code (also list CA/49ST/50ST) | Vehicle Models (if coded see attachment.) | Trans. Type M5 A4 | ETW or Test Wt.* | DPA or RLHP | Ignition (ECM/PCM) Part No. | EGR System Part No. | Catalyst Converter Part No. |
|---|---|---|---|---|---|---|---|
| CA-100 (CA) | WJJL74 | A4 | 4500 | SEE ATTACHMENT | *56041428AE *56044428AE | -- | 52101393 |

* Denotes correction

Date Issued: 06/15/98

Revisions: 08/05/98

TG02-S0S/99

MODELS COVERED BY CERTIFICATE

Vehicle MFR: CHRYSLER

Engine Family: XCRXT0287231
Evaporative Fam: XCRXE0101G2H

Certificate #:

| Model ID | Car Line | California Sales |
|---|---|---|
| WJJL74 | Grand Cherokee 4WD | YES |

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Model Codes
XJ J L  74
|  | |  |
|  | |  ---Body Style
|  | |     72=2 door
|  | |     74=4 door
|  | |     77=open
|  | |
|  | ------ Trim Level
|  |        L=Covers all trim levels
|  |
|  -------- Stearing and Drive Line
|           B=Right Hand Steering, 2 wd-rear
|           U=Right Hand Steering, 4 wd
|           J=Left Hand Steering,  4 wd
|           T=Left Hand Steering,  2 wd-rear
|
----------- Car Line
             XJ=Cherokee
             YJ=Wrangler            TJ=Wrangler(after 1996)
             ZJ=Grand Cherokee      WJ=Grand Cherokee(after 1998)
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Chrysler Corpora
Family Tire Usage



| MODEL | ENG | TRANS | A C | GVW | MKT TYPE | LVW ETW | TIRE DESCRIPTION USE | YR | COD | MFG | OPT | COAST DOWN TIME | *DYNO HP | TIRE PRES F | TIRE PRES R | LOADED VEHICLE WEIGHT: TARGET (LINE 1 IS 20 DEG | COLD CO ELECTRIC DYNO COEFFICIENTS: A | B | C COEFFS,LINE 2 IS 50 DEG | SET A | B | C WHEN NEEDED) | ADJUSTED LOADED VEHICLE WGT: ALVW ETW | COAST DOWN TIME | *DYNO HP | TIRE PRES F | TIRE PRES R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WJJL74 | EVA | DG4 | 4W | Y 5500 | C | 4500 | STD | 99 | TR7 | TZA | DHF | 13.82 | 13.6 | 33 | 33 | 65.60 | | | 0.03671 | | | | | | | | |
| | | | | | | | | | | | | | | | | 59.64 | | | 0.03337 | | | | | | | | |
| | | | | | | | OPT | 99 | TTB | TZA | DHF | 13.38 | 13.1 | 33 | 33 | 73.74 | | | 0.03583 | | | | | | | | |
| | | | | | | | | | | | | | | | | 67.03 | | | 0.03257 | | | | | | | | |
| | | | | | | | OPT | 99 | TTD | TZA | DHF | 12.51 | 13.7 | 33 | 33 | 79.44 | | | 0.03831 | | | | | | | | |
| | | | | | | | | | | | | | | | | 72.22 | | | 0.03483 | | | | | | | | |

* - For DYNO HP = 0.00
Ref To FRONTAL AREA

/ 10. - TG02 - 400 /

Report Date: 04/09/98
Time: 09:49:27

| TIRE DESCRIPTION YR | COD | MFG | OPT | NAME | | SIZE | RPM | CONSTRUCTION COD | TREAD MATERIAL | PLY | SW | SIDEWALL MATERIAL | PLY | OVERLAY MATERIAL | PLY | TREAD DEPTH (IN.) X 1/32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99 | TR7 | TZA | DHF | WRANGLER ST | (A/S) | P225/75R16 | 714 | SBR | 2-Steel/2-Polyester | 4 | OWL | Polyester | 2 | None | 0 | 13 |
| 99 | TTB | TZA | DHF | WRANGLER SR/A | (A/T) | P245/70R16 | 711 | SBR | 2-Polyester/2-Steel | 4 | OWL | Polyester | 2 | None | 0 | 13 |
| 99 | TTD | TZA | DHF | EAGLE LS | (A/SP) | P245/70R16 | 706 | SBR | 2-Polyester/2-Steel | 4 | RBL | Polyester | 2 | None | 0 | 13 |