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State of California
AIR RESOURGES BOARD
EXECUTIVE ORDER A-9-455
Relating to Certification of New Motar Vehicles
DAIMLERCHRYSLER CORPORATION
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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 2000 model-year DaimlerChrysler 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: YCRXT0232230 Displacement: 3.8 Liters (232 Cubic Inches)
Exhaust Emission Control Systems and Special Features:

Exhaust Gas Recirculation
Three Way Catalytic Converter
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:


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 2000 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

| Loaded Vehicle Weight (Ibs.) | Miles | NMOG | CO | MOx | HCHO | $\mathrm{CO}\left(20^{\circ} \mathrm{F}\right)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3751-5750 | 50,000 | 0.080 | 0.6 | 0.2 | 0.002 | 6.5 |
|  | 100,000 | 0.100 | 0.7 | 0.2 | 0.002 | $\mathrm{n} / \mathrm{a}$ |

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 Enission 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 listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent ModelYear Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) 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 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 day of June 1999.


Manufacturer: , DaimlerChrysler Corp Exh Eng Farn: YCRXTO232230 Evap Fam: YCRXEOTO1G2A
 Exi Sto: CATER 1 -TEV - IEV $x$ ULEV SULEV $\qquad$
$\qquad$ NLEV X 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, LDT $1, \overline{M D V} 1$, MDV2, MDV3, MDV4) Fuel Type(s): Dedicated X Flex-Fuel __ DualFte! __ Brlevel CNG __ LNG _LPG_ME ME EES _Gasoline _X Diesel _ Emis Test Fuel(s): Indo __CBG X CNG __ LPG_M85__ E85 5 (specify) $\qquad$ Diese:: i3 CCR 2282 __ 40 CFR $86.113-90$ $\qquad$ 40 CFR $86.113-94$
$\qquad$ Evaporative Emission Test Procedure: California $\qquad$ Federal $x$ Service Accum: Std AMA $\qquad$ Mod AMA $-x$ Mir ADP $\qquad$ Other! specif $\qquad$ NMOG Test Procedure: N/A _ Std _ Equiv $X$ R/L Test Proc: SHED $\qquad$ Pt Source $\underline{X}$ Engire Ccnfiguration: V-ó_Displacement _ 3.8 _Liters _232_Cubic Inches Valves per Cylinder: _2 Rated Horsepower: 162 @ 4400 0 O 4400 RFM Engine: Front $x$ Rear __ Drive: FWD $X$ RWD _ 4WD-FT $\qquad$
$\qquad$ Exhaust ECS (eg. EGR, MFI, TC, CAC): EGR HO2S(2).SFI,TWC,
(use abbreviations per SAE J1930 JUN93)


Date issued: 04/30/99
Revisions: $5 / 20 / 89$,
007003.00c


| Chryster Corporatiun Family Tire Usage |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| LOADED VEMICLE HEIGHy |  |  |  |  |
| coast |  | tire | COLD CO | ELECTRIC DYNo coefficients |
| DOWN | *DYNO | PRES | target A b | C SET A B C |
| time | HP | F R | (LINE 1 IS 20 deg | CoEffs, line 2 IS 50 deg heen needed) |
| 17.44 | 10.2 | 3535 | 35.78 | 0.03264 |
|  |  |  | 32.53 | 0.02967 |
| 17.39 | 10.0 | 3535 | 36.26 | 0.03246 |
|  |  |  | 32.96 | 0.02951 |
| 16.67 | 10.2 | 3535 | 37.71 | 0.03397 |
|  |  |  | 34.28 | 0.03088 |
| 18.08 | 10.1 | 3535 | 37.81 | 0.03264 |
|  |  |  | 34.37 | 0.02967 |
| 18.12 | 9.9 | 3535 | 38.30 | 0.03246 |
|  |  |  | 34.82 | 0.02951 |
| 17.36 | 10.2 | 3535 | 39.83 | 0.03397 |
|  |  |  | 36.21 | 0.03088 |
| 17.44 | 10.2 | 3535 | 35.78 | 0.03264 |
|  |  |  | 32.53 | 0.02967 |
| 17.39 | 10.0 | 3535 | 36.26 | 0.03246 |
|  |  |  | 32.96 | 0.02951 |
| 16.67 | 10.2 | 3535 | 37.74 | 0.03397 |
|  |  |  | 34.28 | 0.03088 |
| 18.08 | 10.1 | 3535 | 37.81 | 0.03264 |
|  |  |  | 34.37 | 0.02967 |
| 18.12 | 9.9 | 3535 | 38.30 | 0.03246 |
|  |  |  | 34.82 | 0.02951 |
| 17.36 | 10.2 | 3535 | 39.83 | 0.03397 |
|  |  |  | 36.21 | 0.03088 |
| 17.44 | 10.2 | 3535 | 35.78 | 0.03264 |
|  |  |  | 32.53 | 0.02967 |
| 16.67 | 10.2 | 3535 | 37.71 | 0.03397 |
|  |  |  | 34.28 | 0.03088 |
| 18.08 | 10.1 | 3535 | 37.81 | 0.03264 |
|  |  |  | 34.37 | 0.02967 |
| 17.36 | 10.2 | 3535 | 39.83 | 0.03397 |
|  |  |  | 36.21 | 0.03088 |
| 17.30 | 10.2 | 3535 | 38.69 | 0.03464 |
|  |  |  | 35.17 | 0.03149 |
| 17.36 | 10.2 | 3535 | 39.83 | 0.03397 |
|  |  |  | 36.21 | 0.03088 |
| 17.30 | 10.2 | 3535 | 38.69 | 0.03464 |
|  |  |  | 35.17 | 0.03149 |
| 17.36 | 10.2 | 3535 | 39.83 | 0.03397 |
|  |  |  | 36.21 | 0.03088 |
| 16.67 | 10.2 | 3535 | 37.71 | 0.03397 |
|  |  |  | 34.28 | 0.03088 |
| 17.36 | 10.2 | 3535 | 39.83 | 0.03397 |
|  |  |  | 36.21 | 0.03088 |

 NSHH52 EGH DGL FW Y O C 4250 STD DO TMR TZA OPT 00 TM3 TZA OPT DO TMS TZH

 HZ1 SW1 00 IdO YZ1 AW1 00 OLS 0SZ! J

 HZL SWI 00 IdO NSKH53 EGH DGL FW Y O C 4500 STD OO TMR TZA | $\$$ |
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| 0 |
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 HZ1 SWL 00 1dO
 HZL SWL 00 IdO







## NSHH53 EGH DGL FW Y 0

## NSKHS2 EGH DGL FW Y 0

## 0 A MJ 7DO H5G 2SdXSN

## NSKP53 EGH DGL FW Y O

NSKX53 EGH DGL FW Y 0
NSKX53 EGH DHD FW Y 0
NSYP52 EGH DGL FW Y O
NSYP53 EGH DGL FW Y 0
$\begin{aligned} * & \text { For DYNO HP }=0.00 \\ & \text { Ref TO FRONTAL AREA }\end{aligned}$



2000

ATTACHMENT TO SDS PAGE 1
OF EXECUTIVE ORDER A- $9-455$
Certificate \#:
California

MODELS COVERED. by CERTIficate



```
Grand Caravan ES 2WD
Grand Caravan LE 2WD
Grand Caravan SE 2WD
(OMz) ys dabicion puest
号
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\(\begin{array}{r}x 5 \\ 17 \\ \times 1 \\ \hline\end{array}\)
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``` voyager SE 2WD
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