(Page 1 of 3)

State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-9-334 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 Orders G-45-9;

IT IS ORDERED AND RESOLVED: That 1996 model-year Chrysler Corporation exhaust emission control systems are certified as described below for light-duty trucks:

Emission Standard Category: Ultra-Low Emission Vehicle (ULEV)

Fuel Type: Compressed Natural Gas (CNG)

Engine Family: TCR3.328C7JK Displacement: 3.3 Liters (201 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Three Way plus Oxidation Catalytic Converter Heated Oxygen Sensors (two) Sequential Multiport Fuel Injection

Vehicle models, transmissions, and engine codes are listed on attachments.

The ULEV certification exhaust emission standards for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	Miles	Non-Methane Organic Gas	Carbon <u>Monoxide</u>	Nitrogen Oxides	<u>Formaldehyde</u>
3751-5750	50,000 100,000	0.050 0.070	2.2	0.4 0.5	0.009 0.013

The certification exhaust emission values set forth for non-methane organic gas (NMOG) reflect application of a reactivity adjustment factor (RAF) for CNG-fueled light-duty ULEVs, and the addition of the product of the methane exhaust emission value and a RAF for methane emission of CNG-fueled light-duty ULEVs.

BE IF FURTHER RESOLVED: That, as of the date of this order, the Air Resources Board has not adopted a RAF for light-duty ULEVs operated on CNG, or a methane RAF for such vehicles. Based on available data and analysis, there is a strong likelihood that the initially adopted RAF for such vehicles will be less than 1.000, and the initially adopted methane RAF for such vehicles will be less than the numerical value of the maximum incremental reactivity of methane (0.0148). With the consent of the manufacturer, which has been provided, the applicable RAF and methane RAF for the listed engine family shall be treated for all purposes relating to this certification as:

Reactivity Adjustment Factor for NMOG Mass Emission: 1.000

Reactivity Adjustment Factor for Methane Mass Emission: 0.0148

The ULEV certification exhaust emission values for this engine family in grams per mile are:

Loaded Vehicle Weight (1bs.)	Miles	Non-Methane Organic Gas	Carbon <u>Monoxide</u>	Nitrogen <u>Oxides</u>	<u>Formaldehyde</u>
3751-5750	50,000	0.014	0.2	0.1	0.001
	100,000	0.024	0.3	0.1	0.002

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 non-methane organic gas (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 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 Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

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)(5.1) ("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 29 day of February 1996.

R) B. Summerfield

Assistant Division Chief Mobile Source Division 1996 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS. LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

E.O. # <u>A-9-334</u> Page <u>1</u> of <u>1</u>

Exh Std: CA Ti- Evap Std: 50K_ Veh Class(es): Single Cert Std: Fuel Type(s): I Emis Test Fuel Service Accum: NMOG Test Proce Hybrid: Type A_ Engine Configur Valves per Cyli Engine: Front_	Chrysler Corpor in Eng Fam: CA_ er-ITLEV_ XUseful Lif PCLDT1_ d for Multi-Clas DedicatedXF1CNGXLNG (s): IndoPhDiesel: 13 Std AMA edure: N/A BC, Al ration: V-6Dis inder:2 XMid Rea I EGR, MFI, TC	49SLEV e with R/LLDT2_X s Eng Fam: _ ex-FuelLPG 2CNG_X CCR Z282Mod AMA _ StdEqu PU Cycle (e.e.splacement:Rate=Rate=	50SX ULEV_ In- N/A(Sp N/A(Sp N85 or 40 C Mfr / /3 /3 /3 /3 	AB968 XZR Use ExhMDV2 ecify:Bi OtherM85FR 86.1 ADP R/L Te Diese1 .3L .SFI.	Std: Full Std: Full MDV3 N/A, LDT1Level (specify) Other(sp 13-90 Other st Proce: SI Turbine) iters RWD A	EPA Tier-1 In Use A MDV4_ MDV1, MDV2, Gasoline ecify) ecify) r 40 CFR 86 (Specify) A HED Pt/ 201 5000 1WD-FT	X It In Use_XMDV5 MDV3, MDV4)Diesel113-94 SSIGNED Source Cubic Inches
Engine Code (also list CA/49ST/50ST)	Vehicle Models (if coded see	Trans. Type M5	ETW or	DPA or	per SAE J19 Ignition (ECM/PCM)	EGR System	Catalyst Converter
CA-100 FA-100 (50ST)	attachment) NSHH53 NSHL53 NSKH52 NSKL53	A4 A4	Test Wt.	RLHP S E E A T	Part No. 04727164	Part No.	Part No. 04682820

C Н M E

Date Issued: 01/20/96

Revisions: 02-27-96.

TEOS SOS/CMG

1996 TCR3.328C7JK

ADJUSTED LOADED VEHICLE WGT				ALVW TIME HP F R									
LOADED VEHICLE WEIGHT		COLD CO ELECTRIC DYNO COEFFICIENTS	TARGET A B C SET A B C	(LINE 1 IS 20 DEG COEFFS, LINE 2 IS 50 DEG WHEN NEEDED)							*		
	1 1 1 1 1 1 1 1 1 1	TIRE	PRES	.		35 35	35 35	35 35	35	35 35	35 35	35 35	35 35
			DOWN "DYNO	윺		4.8	9.4	4.6	4.8	4.6	4.0	9.4	4.4
		COAST	DOMEN	TIME		17.36	17.36	17.36	17.36	17.36	17.36	17.36	17.36
			TIRE DESCRIPTION	USE YR COD MFG OPT		96 TEG	56 TES	SMT 98	SH1 96	STO 96 TM3 TZA	96 TAC	98 Tac	28 TM3
				E LVW		4500	4500	4500	4500	4500	4500	4500	4500
			¥	GVW TYF	, , , , , ,	o	ч.	Ü	Ŀ	ပ	L	Ç	L
			<	ENG TRANS C GVW	١	FW Y O	FW Y 0	FW Y O	FW Y 0	FW Y O	FW Y D	FFYO	FW Y O
				TRANS		150	절	ğ	절	형	걸		ם
					1	3 EG				3 EGP		3 EG	3 EG
				HODE		NSH453	RSI E T23	NSHL53	NSHL53	NSKH53	NSKH53	MSKL53	NSKL53 E

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Attachment to SDS pg 2 of 3 Executive Order A-9-334

Chrysler Corporation FAMILY TIRE DESCRIPTION

1996 TCR3.328C7JK

TREAD DEPTH (IN.) X X 1/32 10
4 - 4 - 4
P L OVERLAY Y MATERIAL 2 Ny Lon
P L Y SW SIDEWALL MATERIAL
TREAD DEPTH CONSTRUCTION L L L OVERLAY L X R RPM COD TREAD MATERIAL Y SW SIDEWALL MATERIAL Y 1/32 P215/70R15 780 SBR 2-Steel/2-Polyester 4 BSW Polyester 2 Nylon 1 10
S1ZE P215/70R15
TIRE DESCRIPTION YR COD MFG OPT NAME

Report Date: 12/08/95 Time: 12:37:37

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MODELS COVERED BY CERTIFICATE

Vehicle MFR: CHRYSLER

Engine Family: TCR3.328C7JK Evaporative Fam: TCR5000WYCBA

Model ID	Car Line					
NSKH53	Grand Caravan (2WD)					
NSKL53	Grand Caravan (2WD)					
NSHH53	Grand Voyager (2WD)					
NSHL53	Grand Voyager (2nd)					

