

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-9-182  
Relating to Certification of New Motor Vehicles

CHRYSLER 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 Chrysler Motors Corporation exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
KCR2.5T5FCL8	2.5 (152)	Three-Way Catalyst Heated Oxygen Sensor (Electronic Port Fuel Injection) (Turbocharger) (On-Board Diagnostics)

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 Weight (lbs.)</u>	<u>Hydrocarbons (Grams per Mile)</u>	<u>Carbon Monoxide (Grams per Mile)</u>	<u>Nitrogen Oxides (Grams per Mile)</u>
0 - 3750	0.39	9.0	1.0
3751 - 5750	0.50	9.0	1.0

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

<u>Loaded Vehicle Weight (lbs.)</u>	<u>Hydrocarbons (Grams per Mile)</u>	<u>Carbon Monoxide (Grams per Mile)</u>	<u>Nitrogen Oxides (Grams per Mile)</u>
0 - 3750	0.19	4.4	0.2
3751 - 5750	0.14	3.4	0.3

BE IT FURTHER RESOLVED: That the listed models (in the 0-3750 lbs. loaded vehicle weight class) 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 (the listed models in the 0-3750 lbs. loaded vehicle weight class) 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 also comply with 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 (for the listed vehicle models in the 0-3750 lbs. loaded vehicle weight class) 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 11<sup>th</sup> day of January, 1988.



K. D. Drachand, Chief  
Mobile Source Division

Manufacturer CHRYSLER MOTORS CORPORATION Engine Family KCR2.5T5FCL8  
 Evaporative Family KCRTB Engine Type IN LINE 4 SOHC  
 Liters (CID) 2.5 (152)

**ABBREVIATIONS**

Ignition System

CA-Centrifugal Advance  
 ECU-Electronic Control Unit  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

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

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-Turbocharger  
 SC-Supercharger  
 IC-Intercooler or Aftercooler  
 CCV-Combustion Chamber Valve  
 OBD-On-Board Diagnostics

Fuel System

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

VEHICLE MODELS:

SKE12, SKP52,  
 SKH52, SKL52  
 SHH52, SHP52,  
 SHL52

CARLINE:

DODGE CARAVAN/RAM VAN  
 PLYMOUTH VOYAGER

Engine: Front   X   Mid.        Rear         
 Drive: FWD   X   RWD        4WD Full Time        4WD Part Time

Passenger Cars \_\_\_\_\_ Light-Duty Trucks X Medium-Duty Vehicles \_\_\_\_\_ Gas X Diesel \_\_\_\_\_  
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Manufacturer CHRYSLER MOTORS CORPORATION Engine Family KCR2.5T5FCL8

Displ. (CID) 2.5 (152) Eng. Type SOHC IN LINE 4

Emission Control Sys. (Special Features) TWC,HOS,(EFI),(TC),(OBD)

Engine Code	Vehicle Models (If Coded see attachment)  (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU)  Part No.	Fuel System THROTTLE BODY  Part No.	EGR Valve  Part No.	Catalyst  Part No.
M-1	SKE12	M5	3375	5234106	4307624	NONE	4427196
	SHL52,SKL52		3625				
	SHH52,SKH52, SHP52,SKP52		3750				
A-1	SKE12	A3	3375	5234102	4307620		
	SHL52,SKL52		3625				
	SHH52,SKH52, SHP52,SKP52		3750				
M-2	SKE12	M5	3375	5234350	4307624		
	SHL52,SKL52		3625				
	SHH52,SKH52, SHP52,SKP52		3750				
A-2	SKE12	A3	3375	5234342	4307620		
	SHL52,SKL52		3625				
	SHH52,SKH52, SHP52,SKP52		3750				

Comments: See page one 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.

of Issue \_\_\_\_\_ Revisions: 02-05-88: R.C. 2TC - Revise ECU calibration.

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars \_\_\_\_\_ Light-Duty Trucks X Medium-Duty Vehicles \_\_\_\_\_ Gas X Diesel \_\_\_\_\_ Page 3Manufacturer CHRYSLER MOTORS CORPORATION Engine Family KCR2.5T5FCL8Liter (CID) 2.5 (152) Eng. Type SOHC IN LINE 4Emission Control Sys. (Special Features) TWC,HOS,(EFI),(TC),(OBD)

Engine Code	Vehicle Models (If Coded see attachment)  (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU)  Part No.	Fuel System THROTTLE BODY Part No.	EGR Valve  Part No.	Catalys  Part No.
M-3*	SKE12	M5	3375	5234547	4307624	NONE	4427196
	SHL52, SKL52,		3625				
	SHH52, SKH52, SHP52, SKP52		3750				
A-3*	SKE12	A3	3375	5234535	4307620		
	SHL52, SKL52		3625				
	SHH52, SKH52, SHP52, SKP52		3750				

Comments: See page one 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 05-11-88 Revisions:RC 29TC, ECU CALIBRATION REVISION.

CHRYSLER MOTORS CORPORATION

E.O. # A-9-182

1989 CALIFORNIA 2.5L EFI (TURBO) LIGHT DUTY TRUCK  
KCR2.5T5FCL8 Engine Family  
Test Weight & H.P.

<u>Model</u>	<u>Transmission</u>	<u>Test Wt.</u>	<u>Available Tires*</u>	<u>Tire Sales Code</u>	<u>Coastdown HP</u>	
					<u>GDYR</u>	<u>MICH</u>
SHH52	M5, A3	3750	P195/75R14	TKN	10.9	10.7
SKH52	M5, A3	3750	P205/70R14	TLF, TLG	10.9	10.7
SHP52	M5	3750	P195/75R15	TNE	10.9	-
SKP52	M5, A3	3750	P205/70R15	TPU	10.9	10.7
SHP52	A3	3875				
\$SHL52	M5, A3	3625				
\$SKL52	M5, A3	3625				
\$SKE12	M5, A3	3375	P195/75R14	TKN	11.5	10.9
			P205/70R14	TLF, TLG	11.5	10.9
			P205/70R15	TPU	11.5	10.9
			LT195/75R14C	TKE	-	10.4

GDYR = Goodyear  
MICH = Michelin

\*Following tires are available for each model listed in column one.

ISSUE DATE: 10-21-87  
REV: \$11-17-87