

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-314-8
Relating to Certification of New Motor Vehicles

KIA 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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1996 model-year Kia Motors Corporation exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Gasoline

Engine Family: TKM1.6VJG2EK Displacement: 1.6 Liters (97.5 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Sequential Multiport Fuel Injection
- Three Way Catalytic Converter
- Warm-Up Three Way Catalytic Converter
- Heated Oxygen Sensors (Two)
- Exhaust Gas Recirculation

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

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

| <u>Miles</u> | <u>Non-Methane Organic Gas</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Formaldehyde</u> | <u>Carbon Monoxide (20°F)</u> |
|--------------|--------------------------------|------------------------|------------------------|---------------------|-------------------------------|
| 50,000 | 0.125 | 3.4 | 0.4 | 0.015 | 10.0 |
| 100,000 | 0.156 | 4.2 | 0.6 | 0.018 | n/a |

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.98

The certification exhaust emission values set forth for non-methane organic gas (NMOG) reflect application of a 0.98 RAF for 1996 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

| <u>Miles</u> | <u>Non-Methane Organic Gas</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> | <u>Formaldehyde</u> | <u>Carbon Monoxide (20°F)</u> |
|--------------|--------------------------------|------------------------|------------------------|---------------------|-------------------------------|
| 50,000 | 0.065 | 1.0 | 0.1 | 0.003 | 5.3 |
| 100,000 | 0.070 | 1.1 | 0.1 | 0.003 | 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 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 vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 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, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model 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" 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 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)(6.1) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

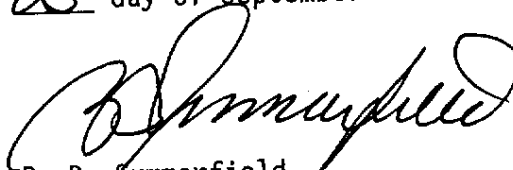
BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That 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 25th day of September 1995.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

199 6 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: Kia Motors Corporation Exh Eng Fam: TKM1.6VIG2EK Evap Fam: TKM1065BYM02
 All Eng Codes in Eng Fam: CA X 49S___ 50S___ AB965___
 Exh Std: CA Tier-1___ TLEV X LEV___ ULEV___ ZEV___; US EPA Tier-1 X
 Evap Std: 50K X Useful Life with R/L___ In-Use Exh Std: Full In Use X Alt In Use___
 Vehicle Class(es): PC X LDT1___ LDT2___ 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___ M85___ Gasoline X Diesel___
 CNG___ LNG___ LPG___ M85___ Other (specify)___
 Emission Test Fuel(s): Indo___ Ph2 X CNG___ LPG___ M85___ Other (specify)___
 Diesel: 13 CCR 2282___ 40 CFR 86.113-90___ 40CFR 86.113-94 X
 Service Accum: Std AMA X Mod AMA___ Mfr ADP___ Other (specify)___
 NMOG Test Procedure: N/A___ Std X Equiv___ R/L Test Proc: SHED X Pt Source___
 Hybrid: Type A___ B___ C___ APU Cycle (e.g., Otto, Diesel, Turbine):___
 Engine Configuration: I-4 Displacement: 1.6 Liters 97.5 Cubic Inches
 Valve per Cylinder: 4 Rated HP: 105 @ 6200 RPM
 Engine: Front X Mid___ Rear___ Drive: FWD X RWD___ 4WD-FT___ 4WD-PT___
 Exhaust ECS (e.g., MFI, EGR, TC, CAC): SFL TWC, WU-TWC, HO2S, EGR
 (use abbreviations per SAE J1930 SEP91)

| Engine Code (also list CA/49ST/50ST) | Vehicle Models (if coded see attachment) | Trans. (M5, A4 etc.) | ETW or Test Wt. | DPA or RLHP | Ignition (ECM/PCM) Part No. | EGR System Part No. | Catalyst Converter Part No. |
|--------------------------------------------|------------------------------------------------|----------------------------|-----------------------|-------------------|--------------------------------------------------------------|--------------------------------------|-----------------------------------|
| B6DC-MN | Kia Sephia | M-5 | 2875 | 5.8 | Distributor : B6BF ECU : ZV86(M/T) ZV87(A/T) | EGR Control Valve: B6BF | B6DE, B6GD |
| B6DC-MC | | | 2875 | 6.4 | | | |
| B6DC-AN | | A-4 | 2875 | 5.4 | | | |
| B6DC-AC | | | 2875 | 5.9 | | | |

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 Revised :
 Sec.17.02.00.00-2