## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-314-13 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 1997 model-year Kia Motors Corporation exhaust emission control systems are certified as described below for light-duty trucks:

Fuel Type: Gasoline

Engine Family: VKM2.01JG1EK Displacement: 2.0 Liters (121.9 Cubic inches)

Exhaust Emission Control Systems & Special Features:

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

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

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

| Loaded Vehicle <u>Weight(lbs.)</u> | Miles             | Non-Methane<br><u>Hydrocarbons</u> | Carbon<br><u>Monoxide</u> | Nitrogen<br><u>Oxides</u> | Carbon<br><u>Monoxide(20°F)</u> |
|------------------------------------|-------------------|------------------------------------|---------------------------|---------------------------|---------------------------------|
| 0-3750                             | 50,000<br>100,000 | 0.25<br>0.31                       | 3.4<br>4.2                | 0.4                       | 10.0<br>n/a                     |

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

| Loaded Vehicle <u>Weight(lbs.)</u> | <u>Miles</u> | Non-Methane<br><u>Hydrocarbons</u> | Carbon<br><u>Monoxide</u> | Nitrogen<br>Oxides | Carbon<br><u>Monoxide(20°F)</u> |
|------------------------------------|--------------|------------------------------------|---------------------------|--------------------|---------------------------------|
| 0-3750                             | 50,000       | 0.18                               | 2.0                       | 0.1                | 5.6                             |
|                                    | 100,000      | 0.21                               | 2.9                       | 0.1                | 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 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 models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year 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 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 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 3 day of September 1996.

R. B. Summerfield
Assistant Division Chief

Mobile Source Division

## 199\_7 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

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| <del></del>  |  | rauon 12                                      | All Eng Pa   | m: VKIVI  | ZULIGIEK I  | :vap Fam:_  | VKM1105AYMEA                                       |
|--|--|---|--|---|---|---|--|
| All Eng Codes  | in Eng Fam: CA   | <u>X</u>                                      | 49S  | 50S   | AB965_  |   |  |
| Exh Std: CA  | Tier-l_X_ TL   | EV  | LEV  | ULEV  | ZEV_  | ; US  | EPA Tier-1 X                                       |
| Evap Std: 50K  | Useful Life  | with R/L                                      | X In-  | -Use Exh  | a Std: Full   | <br>In Use X  | _ Alt In Use                                       |
| Vehicle Class(e  | s): PCLDT  | 1 <u>X</u> LD                                 | т2 мі  | <b>DV1</b>  | MDV2 MD   | V3 MD   | V4 MDV5  |
| Single Cert Std  | for Multi-Class  | Eng Fam:                                      | N/A  | (specify:   | N/A. LDT1   | MDV1 MD   | V2, MDV3, MDV4)                                    |
| Fuel Type(s): [  | edicated_X_ Fle  | ex-Fuel                                       | Dual-F   | uel   | M85   | Gaeolina  | X Diesel   |
| CN   | IG LNG_ L  | .PG N   | <br>185 (  | Other (sn   | ecify)  | Gasonne   | A Diesei   |
| Emission Test 1  | Fuel(s): Indo X  | Ph2   | CNG  | LPG   | M85   | Other (ene  | cify)  |
|  | Diesel:  | 13 CCR 25                                     | 282  | 40 C  | MOJ   | Outer (spe  | R 86.113-94  |
| Service Accum:   | Std AMA X  | Mod AMA                                       | Mf=  | 40 C  | C45 (   | 40CF  | K 86.113-94  |
| NMOG Test Pro  | ocedure: N/A X   | Std   | Equiv.   | ADF   | Other (spe  | CIIY)   | Pt Source  |
| Hybrid: Type A   | B C  | APII Cuele                                    | (o.g. Otto   |   | L lest Proc:  | SHED X  | Pt Source  |
| Engine Configu   | ration: I-4 D  | ienlacomon                                    | (e.g., Ollo  | , Diesel,   | Turbine):   |   |  |
| Valve per Culin  |  |   |  |   |   |   | Cubic Inches                                       |
|  | dor' /   |   | $T_{2-k}$ 1 YYY  |   | 100   | _   |  |
|  | der: 4   |   | Rated HP   | ;   | 130   | @;  | 5500 RPM   |
| Engine: Front_   | X Mid Re   | ar  | Drive: FV  | WD  | RWD <u>X*1</u> 4V   | VD-FT   | 4WD-PT X   |
| Engine: Front_   | X Mid Re   | ar  | Drive: FV  | WD<br>SI  | RWD <u>X*1</u> 4V<br>FI, TWC, EGR                                       | VD-FT<br>, H02S(2                                   | 4WD-PT <u>X</u> .)                                 |
| Engine: Front_   | X Mid Re   | ar  | Drive: FV  | WD<br>SI  | RWD <u>X*1</u> 4V   | VD-FT<br>, H02S(2                                   | 4WD-PT <u>X</u> .)                                 |
| Engine: Front_<br>Exhaust ECS (e   | X Mid Re   | ar<br>ΓC, CAC):                               | Drive: FV  | WD<br>SI<br>obreviatio  | RWD_X*1 4W<br>FI, TWC, EGR<br>ons per SAE J                             | VD-FT<br>, HO2S(2<br>1930 SEPS                      | 4WD-PT_X   |
| Engine: Front_   | X Mid Re   | ar  | Drive: FV  | WDSI  obreviation  DPA  | RWD_X*1 4W FI, TWC, EGR ons per SAE J  Ignition                         | VD-FT, H025(2<br>1930 SEP!<br>EGR                   | 4WD-PT_X   |
| Engine: Front_<br>Exhaust ECS (e<br>Engine Code  | X Mid_ Reg., MFI, EGR, 7   | ar<br>ΓC, CAC):<br>Trans.                     | Drive: FV (use al  | VDSI Dbreviation DPA or   | RWD_X*1 4W<br>FI, TWC, EGR<br>ons per SAE J                             | VD-FT   | 4WD-PT_X  2) Catalyst Converter                    |
| Engine: Front_<br>Exhaust ECS (e<br>Engine Code<br>(also list<br>CA/49ST/50ST                | X Mid Re g., MFI, EGR, 7  Vehicle Models (if coded see             | Trans. (M5, A4                                | Orive: FV  (use above)  ETW  or  | VDSI Dbreviation DPA or   | RWD_X*1 4V FI, TWC, EGR ons per SAE J  Ignition (ECM/PCM)               | VD-FT, HO2S(2) 1930 SEPS  EGR System Part No.       | AWD-PT_X  Catalyst Converter Part No.              |
| Engine: Front_<br>Exhaust ECS (e<br>Engine Code<br>(also list                                | X Mid Re g., MFI, EGR, 7  Vehicle Models (if coded see             | Trans. (M5, A4 etc.)                          | Orive: FV  (use alt  ETW  or  Test Wt.   | VDSI  obreviation  DPA  or  RLHP                                  | RWD_X*1 4W FI, TWC, EGR ons per SAE J  Ignition (ECM/PCM) Part No.      | VD-FT, H025(2) 1930 SEP!  EGR System Part No.  EGR  | 4WD-PT_X  2) Catalyst Converter                    |
| Engine: Front_<br>Exhaust ECS (e<br>Engine Code<br>(also list<br>CA/49ST/50ST                | X Mid Re g., MFI, EGR, 7  Vehicle Models (if coded see attachment) | Trans. (M5, A4                                | ETW or Test Wt. 3500 3625 3500   | SI Obreviation  DPA or RLHP 10.2                                  | RWD_X*1 4V FI, TWC, EGR ons per SAE J  Ignition (ECM/PCM) Part No. ECU: | HO25(2) 1930 SEPS  EGR System Part No.  EGR Control | AWD-PT_X  Catalyst Converter Part No.              |
| Engine: Front_<br>Exhaust ECS (e<br>Engine Code<br>(also list<br>CA/49ST/50ST                | X Mid Re g., MFI, EGR, 7  Vehicle Models (if coded see             | Trans. (M5, A4 etc.)                          | Orive: FV  (use about the second seco | DPA or RLHP 10.2 11.3 11.2 12.4                                   | RWD_X*1 4V FI, TWC, EGR ons per SAE J  Ignition (ECM/PCM) Part No. ECU: | VD-FT, H025(2) 1930 SEP!  EGR System Part No.  EGR  | AWD-PT_X  Catalyst Converter Part No.  K01E 20 600 |
| Engine: Front_<br>Exhaust ECS (e<br>Engine Code<br>(also list<br>CA/49ST/50ST                | X Mid Re g., MFI, EGR, 7  Vehicle Models (if coded see attachment) | Trans. (M5, A4 etc.)                          | ETW or Test Wt. 3500 3625 3500 3625 3500   | DPA or RLHP 10.2 11.3 11.2 12.4 10.1                              | RWD_X*1 4V FI, TWC, EGR ons per SAE J  Ignition (ECM/PCM) Part No. ECU: | EGR Part No.  EGR Control Valve:                    | AWD-PT_X  Catalyst Converter Part No.  K01E 20 600 |
| Engine: Front_Exhaust ECS (e  Engine Code (also list CA/49ST/50ST  7FED-MN  7FED-MC  7FED-AN | X Mid Re g., MFI, EGR, 7  Vehicle Models (if coded see attachment) | Trans. (M5, A4 etc.)                          | ETW or Test Wt. 3500 3625 3500 3625 3625   | DPA<br>or<br>RLHP<br>10.2<br>11.3<br>11.2<br>12.4<br>10.1<br>10.3 | RWD_X*1 4V FI, TWC, EGR ons per SAE J  Ignition (ECM/PCM) Part No. ECU: | EGR Part No.  EGR Control Valve:                    | AWD-PT_X  Catalyst Converter Part No.  K01E 20 600 |
| Engine: Front_Exhaust ECS (e  Engine Code (also list CA/49ST/50ST  7FED-MN  7FED-MC          | X Mid Re g., MFI, EGR, 7  Vehicle Models (if coded see attachment) | ar<br>TC, CAC):<br>Trans.<br>(M5, A4<br>etc.) | ETW or Test Wt. 3500 3625 3500 3625 3500   | DPA or RLHP 10.2 11.3 11.2 12.4 10.1                              | RWD_X*1 4V FI, TWC, EGR ons per SAE J  Ignition (ECM/PCM) Part No. ECU: | FGR Part No.  EGR Control Valve: K01A 20 3          | AWD-PT_X  Catalyst Converter Part No.  K01E 20 600 |

\*1: Sportage 2WD

Issue Date: August 20, 1996

Revised:

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