| Celifornia Environmental Protection Agency | | EXECUTIVE ORDER A-314-0071 | | | |
|--|------------------------|---------------------------------------|--|--|--|
| AIR RESOURCES BOARD | KIA MOTORS CORPORATION | New Passenger Cars, Light-Duty Trucks | | | |

Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Div. 26, Part 5, Chap. 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 & 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED:

That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

| MODEL YEAR | TEST GROUP | VEHICLE TYPE | EXHAUST EMISSION STANDARD CATEGORY | USEFU (mil | | IN- COMP {*=N/A or A/E=ex | AEDIATE USE LIANCE full In-use; h. / evap. iate In-use) | FUEL TYPE | | |
|---------------|--------------|-----------------------------|--|---------------|------------------|------------------------------------|--|------------------|--|--|
| 2007 | 7KMXT03.8VW5 | LDT: <6000# GVW, 3751-5750# | "LEV II" Ultra Low Emission Vehicle (LEV II | EXH / ORVR | EVAP | EXH | EVAP | Gasoline (Tier 2 | | |
| | | LVW | ULEV) | 120K | 150K | A | E | Unleaded) | | |
| No. | | SPECIAL FEATURES | EVAPORATIVE | | DISPLACEMENT (L) | | | | | |
| 1 | 2WU-TWC,T | WC, 2HO2S(2), SFI, OBD(F) | 7KMXR0 | 152PDV | | | | | | |
| * | | * | • | | | | | | | |
| • | | * | 4 | | | | | 3.8 | | |
| • | | * | • | • | | | | | | |

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations.

BE IT FURTHER RESOLVED:

That the exhaust and the evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50^o Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's "NMOG Fleet Average" (PC or LDT) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

BE IT FURTHER RESOLVED:

That for the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California Exhaust Emission Standards and Test Procedures for 2001 and Subsequent Model PC, LDT and MDV).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this <u>64</u> day of February 2006.

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Allen Lyons, Chief Mobile Source Operations Division

California Environmental Protection Agency AIR RESOURCES BOARD

ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

(For bi-, dual- or flexible-fueled vehicles, the STD and CERT in parentheses are those applicable to testing on gasoline test fuel.)

| NMOG FLEET NMOG @ RAF=* AVERAGE [g/mi] CH4 RAF = * | | | NMOG or NMHC | CH4=methane; NMOG=non-CH4 organic gas: NMHC=non-CH4 hydrocarbon; Co≃carbon monoxide; NOx=oxides of nitrogen; r HCHO=formaldehyde; PM=particulate maiter; RAF=reactivity adjustment factor; 2/3 D [g/test]=2/3 day diumal+ hot-soak; RL [g/m]=running loss; ORVR [g/gallon dispensed]=on-board refueling vapor recovery; g=gram; mg=milligram | | | | | | | | | | | | |
|--|--|---|--|--|---|--|---|---|---|--|--|--|---|--|--|-----------------------------------|
| CERT | STD | NMOG | NMHC | STD | ml=mile; K | ml=mile; K=1000 miles; F=degrees Fahrenheit; SFTP=supplemental federal test procedure | | | | | | | | | | |
| 0.055 | 0.055 | CERT [g/mi] | CERT [g/mi] | [g/mi] | | [g/mi] | | x [g/mi] | | HCHO (mg | · · · · · · · · · · · · · · · · · · · | <u> </u> | °M [g/mi] | | | <u>Ox [g/mi]</u> STD |
| | | | fa1 | 0.040 | CERT | STD | CERT | STD 0.05 | | | STD 8. | CER | · | STD * | 0.02 | 0.07 |
| | @ 50K | 0.028 | | 0.040 | 0.6 | 1.7 | 0.02 | 0.00 | | | 8. 11. | | | | 0.02 | 0.07 |
| | @UL 2)50°F&4K | 0.029 | + | 0.055 | 0.8 | 1.7 | 0.02 | 0.07 | | · | 16. | * | | • | + | * |
| | | 0.000 | | NMHC+N | | CO [g | | | +NOx | | [g/mi] | 1 1 | IMHC | C+NOx | 0.0 | [g/mi] |
| CO [g/mi] | | | 445 Y 2018 | (composite) | | (comp | site) | | [g/mi] [US06] | | 1206] | | [g/mi] [SC03] | | | C03] |
| @ 20°F & 50 | 6 50K | | | CERT | STD | CERT | STD | CERT | STD | CERT | STD | | RT | STD | CERT | STD |
| ERT | 2.8 | SFTP @ 4 | 000 miles | + | ÷ | * | * | 0.06 | 0.25 | 8.6 | 10.5 | 0 | .04 | 0.27 | 0.2 | 3.5 |
| STD | 12.5 | SFTP | @ * miles | * | • | * | • | * | * | • | * | | * | * | * | • |
| Eva | aporative Fai | mily | 3-Days Dir (gram | urnal + Hol s/test) @ L | | 2-Days Diu (grams | irnal + Ho s/test) @ | | | Running ams/mile | Loss e) @ UL | | | | l Refueling grams/gallo | |
| | | CERT | STD | | CERT | ERT STD | | CERT | | \$TD | | CERT | | STD | | |
| 714 | (MXR0152PI | DV | 0.41 | | 65 | 0.61 | | | 0.0 | 2 | 0.05 | | 0.01 | | 0.20 | |
| * | | + | | * | | | * | * | | * | | • | | | | |
| | | | • | | * | + | | + | * | | * | | | * | | * |
| | * | | * | | * | * | | * | * | | * | | | * | | * |
| VW=load DSTWC= as recircu C/SC= tu | | ight; ALVW= VC; WU=war econdary air inger; CAC=c | * adjusted LVW m-up catalyst; injection; PAII harge air cool PG=liquefied p | ar; LDT=ligt '; LEV=low + OC=oxidizi R=pulsed Al ar; OBD (F) petroleum ga | * emission ve ing catalyst; R; MFI= ma /(P)=full/par as; E85="8: | * ahicle; TLEV ; O2S=oxyge ultiport fuel in rtial on-board | =transition en sensor; hjection; S d diagnosti Fuel; | * vehicle; E(val LEV; U HO2S=he FI=sequer c; DOR=c | * CS= Emiss LEV=ultra ated O2S; ntial MFI; 1 direct ozor | LEV; SU AFS/HA BI=thrott le reducir | rol System LEV=supe FS=air- fu le body in ng; prefix 2 | er ULEV el ratio jection; 2=parall | '; TWC sensoi DGI=c | * dard; CEf C=3-way (r / heated direct gas | atalyst; AFS; EGR: oline fuel ini | * ition; exhaust ection; |
| W=load DSTWC= las recircl C/SC= tu compresse | + blicable; UL=u led vehicle we =adsorbing TV ulation; AIR=surbo/super cha | ight; ALVW= VC; WU=war econdary air inger; CAC=c | * adjusted LVW m-up catalyst; injection; PAII harge air cool PG=liquefied p | ar; LDT=ligf /; LEV=low OC=oxldizi sepulsed Al ar; OBD (F), xetroleum ga D7 MOD | * emission ve ing catalyst; R; MFI= ma /(P)=full/par as; E85="8: | * shicle; TLEV ; 02S=oxyge ultiport fuel in rtial on-board 5%" Ethanol AR: VE | =transition en sensor; hjection; S d diagnosti Fuel; | * wehicle; El al LEV; UI HO2S=he FI=sequer c; DOR=c E MOD | * CS= Emiss LEV=ultra ated O2S; ttial MFI; 1 direct ozor | LEV; SU AFS/HA BI=thrott le reducir | Incl System LEV=supp FS=air- fu lie body in lie body in lie body in lie body in lie body in lie body in MATIC | er ULEV el ratio jection; 2=parall DN ERME IN-US DMPLI/ (A or ful E=exh. / mediate | r; TWC sensor DGI=c el; (2) DIATE E E NCE Lin-us evap. HIn-us | * dard; CEf 2=3-way c r / heated direct gas suffix≍se E E e; F e; F | atalyst; AFS; EGR: oline fuel ini | * exhaust ection; NG= |
| VW=load DSTWC= as recircl C/SC= tu ompresse | * plicable: UL-u led vehicle we adsorbing TV ulation; AIR=s troo/super cha ad/liquefied na | ight; ALVW= VC; WU=war econdary air inger; CAC=c | + =passenger c adjusted LVM -up catalyst; injection; PAII harge air cool PG=liquefied p 201 | ar; LDT=ligf ; LEV=low OC=oxidizi R=pulsed Al ar; OBD (F) betroleum g; D7 MOD | * emission ve ing catalyst; R; MFI= ma /(P)=full/par as; E85="8: | ¢ shicle; TLEV 02S=oxyge ultiport fuel in trial on-board 5%" Ethanol AR: VE EVAPC FA | =transition en sensor; njection; S d diagnosti Fuel; EHICLE DRATIVE | * vehicle; Et al LEV; UI HO2S=he FI=sequer c; DOR=c E MOD | * CS= Emis: LEV=ultra ated O2S; ntial MFI; 1 Jirect ozor ELS IN ELS IN | | Incl System LEV=supp FS=air- fu lie body in lie body i | er ULEV el ratio jection; 2=parall N-US DMPLI/ /A or ful E=exh. / mediate | '; TWC sensol DGI=c el; (2) DIATE E E ANCE Lin-us evap. | tard; CEF ≥3-way c r / heated direct gas suffix≃se E E e; F e) AP | atalyst; AFS; EGR: oline fuel inj ries; CNG/L | * ition; exhaust ection; |