California Environmental Protection Agency

⊘ Air Resources Board

KIA MOTORS CORPORATION Executive Order: A-314-0224

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

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Pursuant to the authority vested in the Air Resources Board by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: 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.

							TEST GRO	UP I	NFO	RMATION	_					
MODEL YEAR	TEST GROUP				VEHICLE CLASS(ES)					FUEL CATEGORY				FUEL TYPE		
2016	2016 GKMXV02.44P4					PC				DEDICATED SINGLE FUEL VEHICLE				GASOLINE		
U	JL LIFE		VEHICLE EMISSION CATE				GORY INTERIM / INT			TE	TERMEDIATE IN-USE STD					
EXH/ORVR EVAP					FTP				SFTP		Γ	FTP		SFTP		
150000 150000					LE	v3 t	ULEV70 LEV 3 C			OMPOSITE	DSITE NMOG+NOX		x	NMOG+NOX		
SPEC	IAL	FEATUR	HAUS STEMS		SIOI	N CONTROL			OBD STATI		ATUS	IS ENGIN		NE DISPLACEMENT (L)		
1	WU-TWC, TWC, HO2S(2), DFI									FULL	ALL MODELS					
*	*									PARTIAL *				2.4		
*	* PARTIAL WITH * FINES															
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION															
EVAP	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR							GOR'	PRY EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES				
GKMXR0135DWE					LEV 2					PC *			*			
						ΕN	MISSION C	REDI	T INF	ORMATION						
ALLOWANCE FOR TEST GROUP									NMOG CREDIT NON-PZEV ZE			TO LINMOG CR			OPTIONAL EXH. STD FOR WORK	
BASEI	BASELINE PZEV AT PZE					TZEV			EVAP					`	TRUCKS	
* *					*				И			И			И	
NMOG AND FLEET AVERAGE INFORMATION																
NIMOG RAFICHARAFI				IOG/NMHC ATIO			HC RATIO		NMOG+NOX FLE PC+LDT (0-3750 (g/mi)		0-3750 LVW)	W) LDT (NOX FLEET STD 3751 LVW-8500) + MDPV (g/mi)		
*	* * 1.10						* 0.093					0.110				

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.

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BE IT FURTHER RESOLVED:

The exhaust and evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° 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+NOx and greenhouse gas Fleet Average (PC or LDT or MDPV) or "Vehicle Equivalent Credit" (MDV) compliance plan shall be equalized as required.

BE IT FURTHER RESOLVED:

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 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for PC, LDT and MDV).

BE IT FURTHER RESOLVED:

Vehicles certified under this Executive Order shall not be introduced into commerce before January 2, 2015.

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.

Annette Hebert, Chief

Temissions Compliance, Automotive Regulations and Science Division

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UNLEADED

							A	ГТАС	НМ	ENT							
	EXH	AUS	ST A	ND E	VAPOR	RATIVI	EMIS	SION	STAN	IDAR	DS ANI	CERT	IFIC	ATION	LEVELS	S	
		EX	HAU	ST EMI	SSION	STANDA	RDS AN	ND CER	TIFICA	TION	LEVELS	(FTP, HW	FET	, 50°F, 20	°F)		
	FU	FUEL TYPE		mon adjus ORV	oxide; N stment fa 'R [g HC	Ox: oxid actor; 2D /gallon o	es of nitr DHS/3DH dispense	rogen; H IS [g HC d]: on-bo	ICHO: :/test]: oard re	formalo 2/3 day fueling	dehyde; F ys diurnal y vapor re	bon; NMh PM: particu +hot-soak covery; g: lure; SFTF	llate ; RL gran	matter; R/ [g HC/mi] n; mg: mill	AF: reacti running igram; mi	vity loss;	
					NMOG+I (g/mi		1	CO g/mi)		NOx (g/mi)		HCF (mg/				M mi)	
					RT	STD	CERT	STI	D	CERT	STD	CER	Т	STD	CERT	STD	
FTP@50	ok	*			*	*	*	*		*	*	*		*	*	*	
FTP@U	11 1		INE- E10	0.	026	0.070	0.60	1.	7	*	*	*		4	*	0.01	
50°F @4	4121		INE- E10	0.	041	0.140	0.5	1.	7	*	*	*	16				
					FI	EL TYP	F			NMOG+NOx (g/n			i)		CO (g/mi)		
					FUEL LIFE			С	ERT	STD		CER	Г	STD			
HWFET	T @ 50K					*					*	*					
HWFET @ UL			GASOLINE-LEV3 E10						0.	0.020 0.070)					
20°F @ 50K				GASOL	INE-CO	LD CO	LOW OC	LOW OCTANE					1			10.0	
				SFT	PEXHA	UST EM	ISSION	STAND	ARDS	AND C	CERTIFIC	ATION L	EVEL	S			
				15	US06						SC03	,		CO	MPOSITE	:	
	FUEL '	TYP	E	ı	NMOG+1 (g/mi		CO (g/mi)		M /mi)		G+NOx /mi)	CO (g/mi)		OG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	
			CI	ERT	*		*	1. 44			*	*					
@ 4K	*		S	TD	*		*	14.4			*	*			3.1		
			CI	ERT	*		*	,	*		*	*	(0.025	1.67	*	
@ UL	GASOLINI LEV3 E1		ITS		*	*		*			*	*	0.110		4.2	*	
	TEAD			BIN		建和高				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0.		0.090		1242	
		٧	VHOL	E VEH	ICLE EV	APORA	TIVE EN	MISSION	IATE I	NDARE	OS AND	CERTIFIC	ATIC	N LEVEL	S		
EVA D	ODATIL	,_				W	HOLE VI	EHICLE	EVAP	ORAT	IVE TEST	ring		DI	_ (g/mi) @	9 111	
EVAPORATIVE FU		FUE	L TYPE	L TYPE 3DHS (g			/test) @ UL			2DHS (g/test)			RE (g/iii)		@ OL		
					CE	RT S	STD	FEL	CE	RT	STD	FE	<u> </u>	CER	Т	STD	
GKMXR0135DWE		VE	PH	ASE 2	SE 2		.50	* 0.			0.65	*			0.05		
C	RVR /	FUE	LON	LY / CA	NISTER	BLEED	EVAPO	PRATIVI				RDS AND				ELS	
												P & CAN					
EVAPORATIVE FAMILY		Æ	OR	VR (g/g	gallon) (allon) @ UL		1		OHS RIG TEST g/test) @ UL		2DHS RIG (g/test) @				LEED CANISTER EST (g/test) @ 4K	
			FUEL	TYPE	CERT	STD			CE	RT	STD	CERT	STD		CERT	STD	
GKMXR	R0135DV	1	TIE	ER 2	0.02	0.20	*			*	*	*	*		*	*	

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: not applicable; #; pounds; UL: useful life; PC: passenger car; LDT; light-duty truck; LDT1; LDT<6000#GVWR,0-3750#LVW; LDT2; LDT<6000#GVWR,3751-5750#LVW; LDT3: LDT 6001-8500#GVWR,3751-5750#ALVW; LDT4: LDT 6001-8500#GVWR,5751-8500#ALVW; MDV: medium-duty vehicle; MDV4: MDV 8501-10000#GVWR; MDV5; MDV 10001-14000#GVWR; MDPV: mediumduty passenger vehicle; ECS: emission control system; CERT: certification; STD: standard; FEL: family emission limit; GVWR: gross vehicle weight rating; LVW: loaded vehicle weight; ALVW: adjusted LVW; LEV: low emission vehicle; ÚLEV: ultra LEV; SULEV: super ULEV; ZEV: zero-emission vehicle; PZEV: partial ZEV; AT PZEV: advanced technology PZEV; TZEV: transitional ZEV; TWC/OC: 3-way/oxidizing catalyst; ADSTWC: adsorbing TWC; HAC: HC adsorbing catalyst; WU: warm-up catalyst; NAC: NOx adsorption catalyst; SCR-U or SCRC/SCR-N or SCRC-NH3: selective catalytic reduction-urea/ammonia; NH3OC: ammonia oxidation catalyst; CTOX/PTOX: continuous/periodic trap oxidizer; DPF: diesel particulate filter (active); GPF: PM filter for sparkignited engine; HO2S/O2S: heated/oxygen sensor; WR-HO2S or AFS: wide range/linear/heated air-fuel ratio sensor; NOXS: NOx sensor; PMS: PM sensor; RDQS: reductant quality sensor; NH3S: ammonia sensor; EGR: exhaust gas recirculation; EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fuel injection; DFI/IFI: direct/indirect fuel injection; TC/SC: turbo/super charger; CAC: charge air cooler; F/P/\$: full/partial/partial with fines on-board diagnostic; DOR: direct ozone reducing; HCT: hydrocarbon trap; BCAN: bleed carbon canister; prefix 2: parallel; (2) suffix: series; CNG/LNG: compressed/liquefied natural gas; LPG: liquefied petroleum gas; E85: "85%" ethanol ("15%"gasoline) fuel; E10: "10%" ethanol ("90%"gasoline) fuel; A: automatic (with lockup); M: manual transmission; SA: semi-automatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM; automated manual transmission; AMS; automated manual-selectable transmission; OT; other transmission

	2016 MOD	EL YEAR	: VEHI	CLE MOD	ELS INFORI	MAT	ION	
MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH	OBD	PZEV TYPE
KIA	SORENTO AWD	PC	2.4	SA6	GKMXR0135DWE	1	F	*
KIA	SORENTO FWD	PC	2.4	SA6	GKMXR0135DWE	1	F	*