

HYUNDAI MOTOR COMPANY

Executive Order: A-254-0388-1
New Passenger Cars, Light-Duty Trucks and
Medium-Duty Vehicles
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Pursuant to the authority vested in California 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 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.

SYSTEMS SYSTEMS OBDISTATOS (L) 1 SFI, WR-H02S, H02S, WU-TWC, TWC * PARTIAL * PARTIAL ALL MODELS EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS KHYXR0130CEG LEV 3 OPTION2 EMISSION CREDIT INFORMATION NMOG+NOX FLEET AVE. CREDIT FOR NON-PZEV ZERO-EVAP NMOG CREDIT FOR EXTENDED WARRANTY NMOG AND FLEET AVERAGE INFORMATION NMOG AND FLEET AVERAGE INFORMATION NMOG CREDIT FOR DOR NMOG AND FLEET AVERAGE INFORMATION NMOG CREDIT FOR MOG+NOX FLEET STD NMOG+NOX FLEET STD NMOGHNOX FLEET STD						TEST CDC	VI ID 14	JEOR	MATION					
YEAR	1100			т—		TEST GRO	יון אטי	NFOR	MATION					
USEFUL LIFE (miles)									FUEL C	ATEGORY		FUEL TYPE		
EXH/ORVR	2019 KHYXV02.0CE3 PC											GASOLINE		
150000	USEFUL LIFE (miles) VEHICLE EMISSION							ATE	GORY	INTERIM / IN	TEF	RMEDIATE IN-USE STD		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS OBD STATUS FULL PARTIAL ALL MODELS PARTIAL WITH FINES EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS SPECIAL FEATURES KHYXR0130CEG LEV 3 OPTION2 EMISSION CREDIT INFORMATION NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY NMOG CREDIT FOR NON-PZEV ZERO-EVAP NMOG CREDIT FOR DOR NMOG CREDIT FOR DOR NMOG AND FLEET AVE. CREDIT FOR EXTENDED WARRANTY NMOG AND FLEET AVERAGE INFORMATION NMOG CREDIT FOR MON-PZEV LOT OPTIONAL EXH. STI FOR WORK TRUCKS NMOG CREDIT FOR DOR NMOG CREDIT FOR DOR OPTIONAL EXH. STI FOR WORK TRUCKS NMOG AND FLEET AVERAGE INFORMATION NMOG CH44 RAF NMOG/NMHC RAFIO NMOG+NOX FLEET STD NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) MDV (10,001-14,000 GVWR) (g/mi)	EXH/ORVR EVAP FTP							SF	SFTP FTP			SFTP		
SYSTEMS 1 SFI, WR-HO2S, HO2S, WU-TWC, TWC * * * PARTIAL ALL MODELS EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS KHYXR0130CEG LEV 3 OPTION2 EMISSION CREDIT INFORMATION NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY Y NMOG CREDIT FOR NON-PZEV ZERO-EVAP NMOG AND FLEET AVERAGE INFORMATION NMOG AND FLEET AVERAGE INFORMATION NMOG AND FLEET AVERAGE INFORMATION NMOG CH4 RAF RAF NMOG/NMHC RATIO NMOG+NOX FLEET STD NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) (g/mi) MMOG CH4 RAF RAF NMOG/NMHC RATIO NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) (g/mi) MDV (10,001-14,000 GVWR) (g/mi)	15	0000	150000		LEV3	SULEV30	LEV	3 COMPOSITE *				PM		
*	SPE	CIAL FE				ON CONTRO	L		OBD S	TATUS	E	ENGINE DISPLACEMENT (L)		
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NMOG RATIO NMOG+NOX FLEET STD NMOG+NOX FLEET S	Y N								N			N		
RAF RAF RATIO RATIO PC+LDT (0-3750 LVW) LDT (3751 LVW-8500 GVWR) + MDPV (g/mi) GVWR) (g/mi)					NMOG	AND FLEET	AVE	RAGI	INFORMA	TION				
* * 1.10 * 0.072 0.083 *	NMOG CH4 NMOG/NMHC HCHO					PC+LDT (0-3750 LV			V) LDT (3751 LVW-8500			MDV (10,001-14,000		
	*	*	1.10		*	. 0	.072			0.083		*		

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. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)



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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 fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c)(3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV 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).

day of September 2018.

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

This Executive Order hereby cancels and supersedes Executive Order A-254-0388 dated June 29, 2018.

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

Executed at El Monte. California on this

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division



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								A	TTAC	HM	ENT									
	EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS																			
EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)																				
		FUEL	. TYF	m a O	onoxio djustm RVR [de; No ent fa g HC/	Ox: oxionictor; 2 Sgallon	des of nit DHS/3DI dispense	rogen; F HS [g H(ed]: on-b	ICHO: C/test]: oard re	formald 2/3 days fueling	ehyde; F s diurnal vapor re	bon; NMH PM: particu +hot-soak covery; g: ure; SFTP	ilate i ; RL gram	matter; R. [g HC/mi] n; mg: mill	AF: re : runn ligram	eactivi ing lo i; mi: i	ty ss;		
					NMOG+NOx (g/mi)			CO (g/mi)				Ox mi)		HCH (mg/n		PM (g/mi)		1		
				CER				CERT STD		D	CERT STD		CERT		STD	CERT		STD		
FTP@5	0K	_	*		*	_	*	*	*		*	*	*		*	*		*		
FTP@U	JL	GASO LEV3		- 1	0.018	3 0	.030	0.3	1.	0	*	*	*	*		0.001		0.003		
50°F @4	4K	GASO LEV3			0.015	5 0	.060	0.3	1.	0	*	*	*		8					
					FUEL TYPE						NMOG+NOx (g/mi)				CO (g/mi)					
									'E			RT	STD		CERT		STD			
HWFE1	HWFET @ 50K						*				1	* *								
HWFE	HWFET @ UL				GASOLINE-LEV3 E10						0.0	800	0.030							
20°F @ 50K				GA.	ASOLINE-COLD CO LOW OCTANE										1.4		1	0.0		
				S	FTP E	XHAL			STAND	ARDS	AND C		ATION LE	VEL						
					US06							SC03				MPO				
	FUEL TYPE			NMOG+NOx (g/mi)		CO (g/mi)	1 -	PM g/mi)		S+NOx mi)	CO (g/mi)		OG+NOx (g/mi)		00 /mi)	PM (mg/mi)				
@ 4K		*		CERT	ERT		T *			*				*	*					
				STD		*		*				*	*							
				CERT	RT *			*		2	ļ	*	*	(0.016	1	. 5	*		
@ UL			V3 E10 STD		rD *		* 6		6	*		*	0.090		4	.2	*			
				BIN											0.030					
			WH	OLE V	EHICL	E EV							CERTIFICA	ATIO	N LEVEL	.S				
EVAPORATIVE					WHOLE VEHICLE EVAP								RL (g/mi) @ UL							
	FAMILY		FUEL 145		(3			g/test) @ UL			2DHS (g/test)		-							
			GASOLINE-		CERT S		STD	STD FEL CI		RT STD		FEL		CERT		STD				
KHYXR0130CEG LEV3			EV3 E	E10 0.256 0.300 *						0.194 0.300 * 0.03						0.05				
	DRVI	R / FU	EL C	ONLY /	CANI	STER	BLEE	D EVAP	ORATIV				RDS AND				LEVE	LS		
EVAP				ORVR	R (g/gallon) @ UL					30	HS RIG	TEST	2DHS RIG (g/test) @		TEST	BLEE	BLEED CANISTER EST (g/test) @ 4K			
FA	MIL	۲.	FU	EL TY	pF C	ERT	STD		L TYPE			g/test) @ UL RT STD		_	STD	CER		STD		
KHYXF	R013	OCEG	GA	SOLIN	E- 0	.01	0.20	GAS	OLINE-		*	*	*			* 0.006		0.020		
			T		1			1 10 1 10 1												



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EFFECTIV	E LEAK DIAMETER STANDA	RD AND CERTIFICATION L	EVEL (INCHES)
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD
KHYXR0130CEG	KHYXR0130CEG-AD1	0.00	0.02

': 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; HDV: heavy-duty 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; ULEV: ultra LEV; SULEV: super ULEV; ZEV: zero-emission vehicle; 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 spark-ignited 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; FFH: fuel fired heater; 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; AER: all-electric range; EAER: equivalent AER; PHEV: plug-in hybrid electric vehicle

2019 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	
HYUNDAI	ELANTRA	PC	2.0	SA6	KHYXR0130CEG	1	P	
HYUNDAI	ELANTRA SE	PC	2.0	SA6	KHYXR0130CEG	1	P	