### California Environmental Protection Agency

# **OB** Air Resources Board

HYUNDAI MOTOR COMPANY Executive Order: A-254-0357

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles
Page 1 of 4

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 GROU	PINE	ORMATION	l				
MODE		TEST GROUP VEHICLE			CLE CLASS(ES)		FUE	EL CATE	GORY	FU	EL TYPE	
2018	JH	YXV01	61KF		PC		DEDICA	TED SIN	GLE FUEL	GASOLINE		
ī	USEFUL	LIFE	(miles)	. VE	HICLE EMISSIO	N CA	TEGORY	. IN	TERIM / INT	ERMEDIA	TE IN-USE STD	
EXH	/ORVR		EVAP		FTP		SFTP		FTP		SFTP	
12	0000		150000	LE	I T.E.V.2 III.EV		V 2 SFTP TANDARD	*			*	
SPE	CIAL FE	ATUR		AUST EMISS	SION CONTROL		. ОВ	D STATI	us	ENGINE	DISPLACEMENT (L)	
1	WR-HO	2S, H	02S, WU-	TWC, TWC,	DFI, TC, CAC		FULL		*			
*				*			PARTIAL		*	1.6		
*	*					PARTIAL WITH FINES		LL MODELS				
			EV	APORATIVE 8	& REFUELING (E	VAP	ORVR) FAI	MILY INF	ORMATION			
EVA	P / ORV	R FAN	MILY	EVAPORATIV	E STD CATEGO	ORY		EMISSIC		SPECIA	L FEATURES	
J	HYXR01	251KE	2		LEV 2	EV 2 PC				*		
					EMISSION CRE	DIT I	INFORMATI	ON				
	Α	LLOW	ANCE FO	R TEST GRO	UP	-	MOG CREDI		NMOG CRE		OPTIONAL EXH STD FOR WORK	
BASELINE PZEV AT PZEV TZEV					TZEV	NON	N-PZEV ZER	O-EVAP	DO	R	TRUCKS	
* *				*		N		N		N.		
				NMO	G AND FLEET A	VER	AGE INFOR	MATION				
MOG RAF	CH4 RAF	NMO	FTP G/NMHC ATIO	HCHO/NMHO RATIO	DC-1111 (0-3750 1 VW) 1 111 (3751 1 VW-85)		1 LVW-8500	MDV	NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)			
*	*	1	1.04	*	0.0	79		0	.092	092		

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.



HYUNDAI MOTOR COMPANY Executive Order: A-254-0357

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

Page 2 of 4

#### 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:

The listed vehicle models are conditionally certified in accordance with 13 CCR Section 1968.2(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the on-board diagnostic II (OBD) system of the listed vehicle models has been determined to have nine deficiencies. The listed vehicle models are approved subject to the manufacturer paying a fine of \$175 per vehicle for the third through ninth deficiencies for each vehicle in the listed test group that is produced and delivered for sale in California.

On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of vehicles produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2018 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all vehicles covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$5000 per vehicle pursuant to HSC Section 43154.

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 30th day of June 2017.

nnette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

# **OB** Air Resources Board

# **ATTACHMENT**

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS
EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP. HWFET, 50°F, 20°F)

	CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon	Ī
	monoxide: NOx: oxides of nitrogen: HCHO: formaldehyde: PM: particulate matter: RAF: reactivity	

adjustment factor; 2DHS/3DHS [g HC/test]: 2/3 days diurnal+hot-soak; RL [g HC/mi]: running loss; ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: mile; K: 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP

**FUEL TYPE** 

		NMOG (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
100		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	GASOLINE - TIER 2 UNLEADED	0.023	0.040	0.3	1.7	0.02	0.05	*	8	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.032	0.055	0.5	2.1	0.02	0.07	*	11	*	0.01
50°F @4K	GASOLINE - TIER 2	0.038	0.080	0.3	1.7	0.01	0.05	*	16		

1		NOx	(g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.01	0.07			
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.02	0.09			
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE			0.7	10.0	

## SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	COM	POSITE	
	FUEL TYPE		NMHC+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMHC+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	GASOLINE - TIER 2 UNLEADED	CERT	0.05	1.5		0.01	0.2			
@		STD	0.14	8.0		0.20	2.7			
		CERT	*	*	*	*	*	0.052	*	* .
@ UL	GASOLINE - TIER 2 UNLEADED	STD	*	*	*	*	*	0.097	*	*
		BIN				1-514		0.130	0=10	

## WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE	VEHICLE	EVAPORA'	TIVE TESTI	NG		
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test)	@ UL	2DHS (g/test) @ UL		RL (g/n	ni) @ UL	
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
JHYXR01251KE	GASOLINE - CA PHASE 2	0.20	0,50	*	0.46	0.65	*	0.00	0.05

California Environmental Protection Agency

**OP Air Resources Board** 

HYUNDAI MOTOR COMPANY Executive Order: A-254-0357

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

Page 4 of 4

ORVR / FUI	EL ONLY / CA	NISTER	BLEED	EVAPORATIVE	EMISSION	STANDA	RDS AND	CERTIFICA	TION LEV	ELS
				FUEL ONLY EVAP & CANISTER BLEED					D	
EVAPORATIVE FAMILY	ORVR (g/g	gallon) @	) UL	FUEL TYPE	3DHS R (g/test	IG TEST ) @ UL		IG TEST ) @ UL	1	ANISTER est) @ 4K
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD
JHYXR01251KE	GASOLINE - TIER 2 UNLEADED	0.02	0.20	*	*	*	*	*	*	*

: 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; 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 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: semiautomatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission; AMS: automated manual-selectable transmission; OT: other transmission

2018 MODEL YEAR: VEHICLE MODELS INFORMATION										
	MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE	
	HYUNDAI	ELANTRA	PC	1.6	AM7,M6	JHYXR01251KE	1	\$	*	