#### California Environmental Protection Agency

**⊘** Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0115

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	PIN	FORMAT	ION						
MODE		TEST GROUP VEHICL			CLE CLASS(ES)	ES) FUEL CATEGORY			FUEL TYPE					
2018	3 7	GAV0	6.0VLN PC DEDICATED SINGLE FUEL VEHICLE					GASOLINE						
	USEFUI	LIFE	(miles)	VI	HICLE EMISSIO	N C	ATEGOR	Υ.	IN	TERIM / INT	ERMEDIA	TE IN-USE STD		
EXI	H/ORVR		EVAP		FTP		SFTP			FTP		SFTP		
1:	20000		150000	L	EV2 LEV		EV 2 SF			*		*		
SPE	CIAL F	EATUR		AUST EMISS	SION CONTROL			OBD ST	ΓΑΤ	JS	ENGINE	DISPLACEMENT (L)		
2WU-TWC, 2TWC, 2WR-HO2S, 2HO2S, SFI, AIR, 2TC, 2CAC							FUL	L	*********	*				
*				*			PART	IAL ·	AL	L MODELS	6.0			
*				*			PARTIAI FINI			*	1			
			EV	APORATIVE	& REFUELING (8	EVA	P/ORVR)	FAMILY	'INF	ORMATION				
EVA	AP / ORV	R FAI	MILY	EVAPORATI	VE STD CATEGO	DRY		EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES			
	JVGAR0:	L30EA	N		LEV 2			PC		. *				
					EMISSION CRE	DIT	INFORM	ATION						
	A	LLOW	ANCE FO	R TEST GRO	DUP	_	MOG CR			NMOG CR		OPTIONAL EXH STD FOR WORK		
BAS	BASELINE PZEV AT PZEV TZE				TZEV	NO	NON-PZEV ZERO-EVAP		DC	R	TRUCKS			
. * *				*		1	1	N		N				
				NMC	G AND FLEET	VE	RAGE INI	ORMAT	TION					
NMOG RAF	CH4 RAF		FTP G/NMHC RATIO	HCHO/NMH RATIO	C NMOG+NOX PC+LDT (0-3	3750				MDV	NOX FLEET STD (10,001-14,000 VWR) (g/mi)			
*	*		1.04	0.03	0.0	79			0	.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.



VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0115

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).

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

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

**VOLKSWAGEN GROUP** OF AMERICA, INC.

Executive Order: A-413-0115 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 3 of 4

# **Om 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 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

<b>FUEL TYP</b>	E
-----------------	---

V 100		NMOG (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
1		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	GASOLINE - TIER 2 UNLEADED	0.0415	0.075	0.78	3.4	0.037	0.05	1.2	15	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.0489	0.090	0.96	4.2	0.046	0.07	1.4	18	0.002	0.01
50°F @4K	GASOLINE - TIER 2 UNLEADED	0.0417	0.150	0.50	3.4	0.032	0.05	1.2	30		

71 - 2	FUEL TVDE	NOx	(g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.013	0.07	( Ships		
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.022	0.09			
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			3.64	10.0	

### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03		COMPOSITE		
	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	0.034	0.41		0.090	0.95	14		
0		STD	0.14	8.0		0.20	2.7	0.0935 0.097		
		CERT	*	*	*	*	*	0.0935	*	*
@ UL	GASOLINE - TIER 2 UNLEADED	STD	*	*	*	*	*	0.097	*	*
		BIN	9 7					0.140		×

#### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE	FUEL TYPE	3DH:	S (g/test) (	@ UL	2DI	HS (g/test) @	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
JVGAR0130EAN	GASOLINE - TIER 2 UNLEADED	0.430	0.50	*	0.450	0.65	*	0.000	0.05

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0115

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

Page 4 of 4

#### ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS **FUEL ONLY EVAP & CANISTER BLEED EVAPORATIVE** ORVR (g/gallon) @ UL 3DHS RIG TEST 2DHS RIG TEST **BLEED CANISTER FAMILY** (g/test) @ UL (g/test) @ UL TEST (g/test) @ 4K **FUEL TYPE** CERT STD **CERT** CERT STD CERT STD FUEL TYPE STD GASOLINE JVGAR0130EAN TIER 2 0.011 0.20 UNLEADED

: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: .DT<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
BENTLEY	CONTINENTAL GT	PC	6.0	SA8	JVGAR0130EAN	1	P	*
BENTLEY	CONTINENTAL SUPERSPORTS CONVT	PC	6.0	SA8	JVGAR0130EAN	1	P	*
BENTLEY	FLYING SPUR	PC	6.0	SA8	JVGAR0130EAN	1	P	*