California Environmental Protection Agency

⊘ Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC.

Executive Order: A-413-0112

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.

						TI	EST GRO	UP I	INF	ORMAT	ION						
MODE	TEST GROUP				VEHICLE CLASS(ES)					FUEL CATEGORY				FUEL TYPE			
2018 JVGAT02.0AAA					LDT2					DEDICATED SINGLE FUEL VEHICLE					GASOLINE		
USEFUL LIFE (miles) VEHICLE EMISSI								ION	ON CATEGORY INTERIM / INT					TE	TERMEDIATE IN-USE STD		
EXH/ORVR EVAP					FTP					SFTP		FTP				SFTP	
150000 150000					LE	V3 ULI	ULEV125 LEV 3			3 СОМРО	COMPOSITE		PM		PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS											OBD STATUS		US		ENGINE DISPLACEM		
1 WU-TWC, TWC, WR-HO2S, HO2S, DFI, TC, CAC								C		FUL	.L		*				
*	*									PART	IAL	AJ	LL MODELS			2.0	
*	*									PARTIAL FINE	*						
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION																
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGO								GOR	RY EVAP EMISSION VEHICLE CLA					SPECIA	L FEATURES		
JVGAR0135VCS LEV 3 OPTION2 WIT							2 WITH	FEL			LDT2				*		
						EMI	SSION CI	RED	IT	INFORM	ATION						
ALLOWANCE FOR TEST GROUP									NMOG CREDIT FO							OPTIONAL EXH. STD FOR WORK	
BASE	ELINE P	ZEV	AT	PZEV				ľ	ıOr	N-PZEV Z	ERO-EVAP		DOR		`	TRUCKS	
* * *							*			Ŋ	N 1			N	N N		
	NMOG AND FLEET AVERAGE INFORMATION																
I NMOG/NMHC I				1	HO/NMHC RATIO NMOG+NOX F PC+LDT (0-3 (g/m			0-37	50		NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi			0			
*	*		1.10		*		0	.07	9			(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.

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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:

For evaporative family JVGAR0135VCS, the manufacturer has attested to compliance with the 0.02 inch effective leak diameter standard in 13 CCR Section 1976(b)(1)(G)6 ["Effective Leak Diameter Standard And Procedure"].

day of September 2017.

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

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GASOLINE-TIER3 E10

0.010

0.20

JVGAR0135VCS

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0.016

0.020

							A	TTAC	НМЕ	NT							
	EXHA	UST	Γ AND	EV	APOR	NITAS	E EMIS	SSION	STAND	ARE	S AND	CERTI	FICA	TION	LEVEL	S	
		EXH	AUST I	EMIS	SION S	TANDA	ARDS A	ND CER	TIFICAT	ION L	EVELS	FTP, HW	FET,	50°F, 2	0°F)		
	FUE	FUEL TYPE		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													
- 13				NMOG+NOx (g/mi)			CO . (g/mi)				Ox (mi)	1	HCHC			PM /mi)	
					CERT STD		CERT STD		D C	CERT STE				STD	CERT	STD	
FTP@50K		*		*		*	*	*		*	*	*	*		*		
FTP@U		GASOLINE- TIER3 E10		0.05	19 0	.125	0.1	7 2.:	1	*	*	* *		4	0.0018	0.003	
50°F @4	14/1	OLIN		0.10	72 0	.250	1.03	3 2.:	1	*	*	2.0		16			
					FU	EL TYP	F					x (g/mi)			CO (g/m	i)	
				I OLL I (I L						CERT		STD	STD C		CERT		
HWFET	@ 50K					*					*	*					
HWFET @ UL				GASOLINE-TIER3 E10						0.0203 0.		0.125	25		1		
20°F @ 50K GASOLINE-					E-TIE	TIER3 E10			4 =			0.96		6	12.5		
			S	FTP	EXHAL	JST EM	ISSION	STAND	ARDS A	ND C	ERTIFIC	ATION LE	VELS	3			
977							US06			SC03			CC		OMPOSITE		
	FUEL T	UEL TYPE		NMOG+NOx (g/mi)		CO (g/mi)			NMOG+NOx (g/mi)		CO (g/mi)	NMOG+NOx (g/mi)		x CO (g/mi)	PM (mg/mi		
@ 4K	*		CERT	RT *		*		5-11	*		*			N. E.			
@ 4//				*		*		-	*		*			1			
		TOOL TATE				* *		3.	. 8	*		*	0.0397		0.17	*	
@ UL								1	0			*			4.2	*	
				F-1 (I I					16 1	0.110					
		WH	IOLE V	EHIC	LE EV							ERTIFICA	TION	LEVE	LS		
						W	HOLE \	/EHICLE	EVAPO	RATI	VE TEST	ING		_	1 (-/ 1)		
EVAPORATIVE FAMILY		FUEL		YPE	3	3DHS (g/		/test) @ UL			(g/test)	@ UL		r	RL (g/mi) @	D OL	
			GASOLINE-		-			TD FEL 0.400		Г	STD		0.400		RT	STD	
	0135VC		FIER3				.400		0.262		0.400			0.0		0.05	
0	RVR / F	UEL	ONLY /	CAN	ISTER	BLEED	EVAP	ORATIVE							TION LEV	ELS	
EVADO	DRATIVI		ORVP	ORVR (g/gallon) @ UL										R BLEED TEST BLEED CANISTER			
	MILY		OKVIK	(A.Aa		502	FUE	FUEL TYPE		DHS RIG TEST (g/test) @ UL		2DHS RIG (g/test) @				g/test) @ 4K	
		FL	FUEL TYPE C			STD				Т	STD	CERT	S	TD	CERT	STD	
							1					1				1	

GASOLINE-

TIER3 E10

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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: .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
VOLKSWAGEN	ATLAS	LDT2	2.0	SA8	JVGAR0135VCS	1	P	*