California Environmental Protection Agency

OB Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0048

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 GROU	JP INFOR	RMATION					
MODEL YEAR	TEST GROUP			VEHICLE CLASS(ES)			FUEL C	ATEGORY	FL	FUEL TYPE		
2016	GVGAV02.0VPD			PC				SINGLE FUEL	G	GASOLINE		
US	SEFUL L	IFE (miles)		VEHI	CLE EMISSIO	ON CATE	GORY	INTERIM / IN	ITERMEDIA	TERMEDIATE IN-USE STD		
EXH/C	EXH/ORVR EVAP			F.	TP	SI	TP	FTP		SFTP		
1500	150000 150000			LEV2	יס כיוווס כי		2 SFTP NDARD		*			
SPECIAL FEATURES & EXHAUST EMISSION CONTROL OBD STATUS								TATUS	ENGINE DISPLACEMENT (L)			
1 W	1 WU-TWC, TWC, WR-HO2S, HO2S, DFI, TC, CAC, FULL ALL MODELS											
*	* PARTIAL * 1.8, 2.0											
*	PARTIAL WITH											
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION											
EVAP	/ ORVR I	FAMILY	EVAP	ORATIVE	STD CATEG	ORY	EVAP EMIS VEHICLE		SPECIA	L FEATURES		
GV	GAR0125	VBD		LE	V 2		P	С		*		
GV	GAR0110	VBD		LE	v 2		P	С		*		
				E	MISSION CR	EDIT INF	ORMATION					
	ALL	OWANCE	FOR TES	T GROUP			G CREDIT FO	REDIT FOR	OPTIONAL EXH.			
BASEL	INE PZE	V A	T PZEV		TZEV	NON-P	ZEV ZERO-E	VAP	OR	TRUCKS		
ALL	ALL MODELS *				*		N		и и			
NMOG AND FLEET AVERAGE INFORMATION												
NMOG R	RAF CH4 RAF FTP NMOG/NMHC RATIO HCHO/NMH		IC RATIO	PC+LDT	OX FLEET STD (0-3750 LVW) (g/mi)	LDT (3	NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)					
1.00	00 * 1.04 0			0.0	30	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).

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 ______day of Ju

Annette Hebert, Chief

ZEmissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

	EX					IVE EMIS				-					3	
		EXI-		CH4: m monoxio adjustm ORVR [ethane; NI de; NOx: o ent factor; g HC/gallo	MOG: non- ixides of nit 2DHS/3DH on dispense grees Fahre	CH4 org rogen; h HS [g H(ed]: on-b	ganic gas HCHO: fo C/test]: 2/ board refu	; HC: I rmald 3 days	hydrocar ehyde; P s diurnal vapor rec	bon; NMH M: particu +hot-soak covery; g:	IC: no ulate n ; RL [n-CH4 F natter; R g HC/mi] ; mg: mil	IC; CO: ca AF: reacti : running ligram; mi	vity loss;	
	h.				NMOG C (g/mi) (g/				NOx (g/mi)			HCHO (mg/mi)		PM (g/mi)		
				CERT	STD	CERT	ST	TD C	ERT	STD	CER	T	STD	CERT	STD	
FTP@50	GASOLINE - OK TIER 2 UNLEADED		2	*	*	*	,	*			1		,	0.004	*	
FTP@U	GASOLINE - DUL TIER 2 UNLEADED		2	0.003	9 0.01	0 0.17	1.	.0 0	. 008	0.02	0.02 0.0		4	0.004	0.01	
50°F @4	1	GASOLIN TIER UNLEAL	2	0.006	8 0.02	0 0.18	1.	.0 0	.006	0.02	0.0		8			
			FUEL TYPE					NOx (g/mi)					CO (g/mi)			
										STD		CER'				
HWFET @ 50K				*			4	*		*	*					
HWFE	T @	UL	G	ASOLI	NE - TIE	R 2 UNLE	ADED		0.	003	0.03	35				
20°F (@ 50	K	GA	SOLINE	E-COLD C	O HIGH O	CTANE		20 %	THE STATE OF			1.98	3	10.0	
				SFTP E	XHAUST	EMISSION	STAND	DARDS A	ND C	ERTIFIC	ATION L	EVEL	S			
			48	US06					SC03			COMPOSITE				
	FUE	UEL TYPE		3 %	IHC+NOx CO (g/mi) (g/mi)			PM g/mi)	NMHC+NOx (g/mi)		CO (g/mi)	1	HC+NOx g/mi)	CO (g/mi)	PM (mg/m	
		SOLINE			1.48	3		0.033		0.19						
@ 4K		TIER 2		D 0.14		8.0			0.20		2.7					
		* CE			*	* *		*	*		*	*		*	*	
@ UL					*			*			*			*	. *	
			BIN										*		3.41	
		W	HOLE	VEHICL	E EVAPO	RATIVE E						ATIO	I LEVEL	.S		
EVAPO	ORA	TIVE	FUEL	TVDE	3DH3	WHOLE V		EEVAPO		VE TEST			R	L (g/mi) @	UL	
FA	MIL	Υ.	ULL		CERT	STD	FEL	CER		STD	FEI		CER	т	STD	
GVGAR	0110	OVBD G	ASOLI	NE-CA E 2	0.2640	0.35	*	0.25		0.35	*		0.00			
		(GASOL	INE -		0.05		0.00	20	0.25			0 0		0.05	

0.2339

0.35

0.00

0.05

0.35

0.2370

TIER 2 UNLEADED

GVGAR0125VBD

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ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS												
				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE		IG TEST) @ UL		IG TEST) @ UL	BLEED CANISTER TEST (g/test) @ 4K			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
GVGAR0110VBD	GASOLINE - TIER 2 UNLEADED	0.01	0.20	GASOLINE - CA PHASE 2	0.02	0.0	*	0.0	*	*		
GVGAR0125VBD	GASOLINE - TIER 2 UNLEADED	0.11	0.20	GASOLINE - TIER 2 UNLEADED	0.04	0.0	*	0.0	*			

: 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; 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 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 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH	OBD	PZEV TYPE
VOLKSWAGEN	BEETLE	PC	1.8	M5	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	BEETLE	PC	1.8	SA6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	BEETLE	PC	2.0	AM6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	BEETLE	PC	2.0	М6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	BEETLE CONVERTIBLE	PC	1.8	SA6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	BEETLE CONVERTIBLE	PC	2.0	AM6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	BEETLE CONVERTIBLE	PC	2.0	м6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	JETTA	PC	1.8	M5	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	JETTA	PC	1.8	SA6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	JETTA GLI	PC	2.0	AM6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	JETTA GLI	PC	2.0	М6	GVGAR0110VBD	1	F	PZEV
VOLKSWAGEN	PASSAT	PC	1.8	М5	GVGAR0125VBD	1	F	PZEV
VOLKSWAGEN	PASSAT	PC	1.8	SA6	GVGAR0125VBD	1	F	PZEV