California Environmental Protection Agency

OB Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0104

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	P INFO	ORMATION				
MODE		ST GI	ROUP	VEHIC	LE CLASS(ES)	FUE	LCATE	GORY	FU	EL TYPE
2018	JV	GAJ03	. OAUE	L	DT4, PC		DEDICA	TED SIN	GLE FUEL E	G/	ASOLINE
l	JSEFUL	LIFE	(miles)	VEH	ICLE EMISSIO	N CA	TEGORY	IN	TERIM / INTI	RMEDIA	TE IN-USE STD
EXH	/ORVR		EVAP		FTP		SFTP		FTP	SFTP	
12	0000		150000	LEV	2 ULEV		2 SFTP		*		*
SPE	CIAL FE	ATUR		IAUST EMISSIONEMS	ON CONTROL		ОВ	D STATU	JS	ENGINE	DISPLACEMENT (L)
1	2TWC,	2WR-	HO2S, 2H	102S, DFI+SF 2CAC	I, AIR, SC,		FULL		*		
*				. *			PARTIAL	AL	L MODELS	3.0	
*				*		P	ARTIAL WI	ITH	*		
			EV	APORATIVE &	REFUELING (EVAP/	ORVR) FAI	VILY INF	ORMATION		
EVA	P / ORV	R FAN	MILY	EVAPORATIVI	E STD CATEG	ORY		EMISSIO		SPECIA	L FEATURES
J	VGAR01	40NAF	r	L	EV 2			PC			*
J	VGAR01	55 AA M	1	. 1	EV 2			LDT4			*
J	VGAR01	AR0155NAH LE			EV 2			PC			*
					EMISSION CR	EDIT IN	NFORMATI	ON			
	Α	LLOW	ANCE FO	R TEST GROU	Р		IOG CREDI		NMOG CRE		OPTIONAL EXH STD FOR WORK
BASE	ELINE P	ZEV	AT	PZEV	TZEV	NON	-PZEV ZER	O-EVAP	DO	R .	TRUCKS
	*			*	*		N		N		N
			7	NMOC	AND FLEET	AVERA	AGE INFOR	MATION			
NMOG RAF	CH4 RAF	NMO	FTP G/NMHC ATIO	HCHO/NMHC RATIO	NMOG+NOX PC+LDT (0-		LVW) L	DT (375	X FLEET STO I LVW-8500 MDPV (g/mi)	MDV	NOX FLEET STD (10,001-14,000 VWR) (g/mi)
*	*		1.04 0.03 0.079 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).

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.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVUALIET EMICCION CTANDADOC	AND CEDTICICATION LEVEL	C /ETD LIMEET	ENOT SOUT	
EXHAUST EMISSION STANDARDS	AND CERTIFICATION LEVEL	S (FIP, HVVFE)	, 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

FUEL TYPE

3,19		NMOG (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	GASOLINE - TIER 2 UNLEADED	0.0176	0.040	0.61	1.7	0.031	0.05	*	8	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.0218	0.055	0.88	2.1	0.033	0.07	*	11	0.000	0.01
50°F @4K	GASOLINE - TIER 2 UNLEADED	0.0407	0.080	0.57	1.7	0.024	0.05	0.5	16		

4	FUEL TYPE	NOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD .	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.007	0.07			
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.009	0.09	(F2-2-2)		
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			1.15	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

		40.00		US06		SC03	3	COM	POSITE	
	FUEL TYPE	1 2 1	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	0.042	0.62		0.037	0.78			
		STD	0.14	8.0	-1	0.20	2.7			
		CERT	*	*	*	*	*	0.0514	*	*
@ UL	GASOLINE - TIER 2 UNLEADED	STD	*	* .	*	*	*	0.097	*	*
		BIN		#67191			1	0.100	-	- 11

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	WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS											
			WHOLE \	/EHICLE	EVAPORA	TIVE TESTI	NG					
EVAPORATIVE FAMILY	FUEL TYPE	3DHS (g/test) @ UL			2DHS (g/test) @ UL			RL (g/mi) @ UL				
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD			
JVGAR0140NAF	GASOLINE - TIER 2 UNLEADED	0.287	0.50	*	0.324	0.65	*	0.008	0.05			
JVGAR0155AAM	GASOLINE - TIER 2 UNLEADED	0.725	0.90	*	0.354	1.15	*	0.001	0.05			
JVGAR0155NAH	GASOLINE - TIER 2 UNLEADED	0.327	0.50	*	0.418	0.65	*	0.000	0.05			

ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

				FUEL ONLY EVAP & CANISTER BLEED							
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K		
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD	
JVGAR0140NAF	GASOLINE - TIER 2 UNLEADED	0.021	0.20	*	*	*	*	*	*	*	
JVGAR0155AAM	GASOLINE - TIER 2 UNLEADED	0.066	0.20	*	*	*	*	*	*	*	
JVGAR0155NAH	GASOLINE - TIER 2 UNLEADED	0.031	0.20	*	*	*	*	*	*	*	

: 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

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2018 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
AUDI	A6 QUATTRO	PC	3.0	SA8	JVGAR0140NAF	1	P	*
AUDI	A7 QUATTRO	PC	3.0	SA8	JVGAR0140NAF	1	P	*
AUDI	A8	PC	3.0	SA8	JVGAR0155NAH	1	P	*
AUDI	A8L	PC	3.0	SA8	JVGAR0155NAH	1	P	*
AUDI	Q7	LDT4	3.0	SA8	JVGAR0155AAM	1	P	*