California Environmental Protection Agency

OB Air Resources Board

VOLKSWAGEN GROUP OF AMERICA, INC. Executive Order: A-413-0064

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 GROUP INFORMATION															
MODE		TEST GROUP VEHICLE CLASS(I					S)	FUEL CATEGORY			FUEL TYPE				
201	17 HVGAJ02.0AAC PC							DEDICATED SINGLE FUEL VEHICLE			GASOLINE				
	USEFUL	LIFE	(miles)		VE	HICLE EMISS	CLE EMISSION CATEGORY IN				TERIM / INTERMEDIATE IN-USE ST				
EXI	EXH/ORVR EVAP					FTP			FTP FTP			SFTP			
1	50000		150000		LEV	3 ULEV125	LEV 3 0	СОМРО	SITE	PM		NMO	G+NOX AND PM		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS								OBD STATUS			ENGINE DISPLACEMENT (L)				
1	TWC, WR-HO2S, HO2S, DFI, TC, CAC								L \	ALL MODELS					
*										*	2.0				
*	* PARTIAL WITH * FINES														
	EVAPORATIVE & REFUELING (EVAP)ORVR) FAMILY INFORMATION														
EV	EVAP / ORVR FAMILY EVAPORATIVE STD CATEGOR								EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES			
	HVGAR01	40AAI	2			LEV 2		PC				*			
	HVGAR01	40NAI	·			LEV 2	PC						*		
						EMISSION CE	REDIT INF	ORM	ATION						
	А	LLOW	ANCE FO	R TES	ST GRO	WP .			EDIT FO			OR	OPTIONAL EXH. STD FOR WORK		
BAS	ELINE PZ	ZEV	АТ	PZEV		TZEV	NON-P	ZEV Z	ZERO-EV	AP D	OR		TRUCKS		
	* * *							N				и и			
NMOG AND FLEET AVERAGE INFORMATION															
NMOG RAF	CH4 RAF	CH4 NMOG/NMHC HCHO/NMHC			PC+LDT (IMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)		NMOG+NOX FLEET ST LDT (3751 LVW-8500 GVWR) + MDPV (g/mi		MDV (10001-14000		(10001-14000			
*	*	1.10 0.03			0	0.086			0.101			*			

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.

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

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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 March 2016

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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ATTACHMENT

	EXHA	UST	AND	EVA	PORAT	IVE EN	MISSI	ON S	STAN	DAR	OS ANI	CER	TIFIC	CATION	LEVEL	S
		EXH	AUST	EMISS	ON STAI	NDARDS	AND	CERT	TIFICA"	TION L	EVELS	(FTP, F	WFE	T, 50°F, 20	°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												
					OG+NOx g/mi)		C(g/n				Ox /mi)	_	HC (mg	HO /mi)	Pl (g/mi) @ RT CO (g/mi)	PM /mi)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	973 J			CERT	STE	CE	RT	STE) (ERT	STO	CE	RT	STD		STD
FTP@5	OK	*		*	*		*	*		*	1		k	*	*	*
FTP@L	11 .	OLIN 73 E		0.043	4 0.12	25 0.	.30	2.1	L	*	*		*	4.	0.0010	0.003
50°F @	1361	OLIN		0.091	5 0.25	50 0.	.87	2.1		*	*		*	16		
	i de la como				EIIEI :	TVDE				NI	MOG+NO	x (g/m	i)		CO (g/m)
A Maria				FUEL TYPE						CERT		ST	D	CER	Г	STD
HWFET @ 50K				*					* *					in the state of th		
HWFET @ UL			GA	ASOLINE-LEV3 E10					0.0226		0.125					
20°F	@ 50K			GA	SOLINE-	LEV3 E	10							1.11		10.0
			5	FTP E	XHAUST			ANDA	RDS A	AND C	ERTIFIC	ATION	LEVE	LS		
							US06			SC03				co	MPOSITE	
7	FUEL T	YPE			oG+Nox g/mi)	(g/m		Pl (mg/			G+NOx mi)	CO (g/mi)	1	MOG+NOx (g/mi)		PM (mg/mi
@ 4K	*		CERT		*	*	Carl				*	*		# 4 0 16 CC CERT 1.11 LS COM MOG+NOx (g/mi) 0.0431 0.103 0.070 DN LEVELS		
			STD		*	*					*	*	73			
			CERT		*	*		2			*	*		0.0431	0.28	*
@ UL	GASOLI LEV3		STD		*	*		1	0		*	*		0.103	4.2	*
			BIN	100	1, 3									0.070	Att Let	
		WH	IOLE V	EHICL	E EVAPO								CATI	ON LEVEL	.S	
EVAP	ORATIVE		UEL T	VDE	3DH:	WHOLE S (g/test			EVAPO		VE TEST			RI	_ (g/mi) @	<u>)</u> UL
FA	MILY	1	JLL I	1 1 60	CERT	STD		EL	CER		STD		EL	CED	T	STD
HVGAR	0140AA	0 1	ASOLI A PHA		0.439	0.50	+	*	0.45		0.65		*	0.00		0.05
		_	ASOLI		0.655						0			1		0.05

0.324

0.65

0.008

0.05

0.287

TIER 2 UNLEADED

HVGAR0140NAF

0.50

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

				FUEL ONLY EVAP & CANISTER BLEED									
EVAPORATIVE FAMILY	ORVR (g/g	gallon) @	D) 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			
HVGAR0140AAP	GASOLINE - TIER 2 UNLEADED	0.014	0.20	*	*	*	*	*	*	*			
HVGAR0140NAF	GASOLINE - TIER 2 UNLEADED	0.021	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; HAG; 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; 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

2017 MODEL YEAR: VEHICLE MODELS INFORMATION

M	AKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
A	UDI	A4	PC	2.0	AMS7	HVGAR0140AAP	1	F	*
A	UDI	A4 QUATTRO	PC	2.0	AMS7	HVGAR0140AAP	1	F	*
A	UDI	A6	PC	2.0	AM7	HVGAR0140NAF	1	F	*
A	UDI	A6 QUATTRO	PC	2.0	SA8	HVGAR0140NAF	1	F	*