

Executive Order: A-413-0116

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 GRO	UP IN	IFOR	MATION					
MODEL YEAR TEST GROUP			VEHICLE CLASS(ES) FI			FUEL C	ATEGORY		FUEL TYPE				
201	7T 8	GAT02.0VUD			LDT2				SINGLE FUEL HICLE	GASOLINE			
	USEFUI	LIFE (miles)		VEH	IICLE EMISS	ION C	ATE	GORY	INTERIM / IN	TERM	EDIATE IN-USE STD		
EX	H/ORVR	EVAP			FTP		SF	TP	FTP		SFTP		
1	20000	15000	0	LEV	2 ULEV	I	EV 2 STAN	SFTP DARD	. *		*		
SP	ECIAL FI	EATURES & EX	(HAL STEN		ON CONTRO	L		OBD S	TATUS	EN	GINE DISPLACEMENT (L)		
1	WU-TW	C, TWC, WR-	H02S	, HO2S, D	FI, TC, CA	'C		FULL	*		:		
*	_		7	t			PARTIA		ALL MODELS		2.0		
*	* *							TIAL WITH FINES	*				
		E	VAP	ORATIVE &	REFUELING	(EVA	P/OR	VR) FAMIL	INFORMATION	1			
EV	AP / ORV	R FAMILY	EV	APORATIVE	STD CATE	GORY	,	EVAP EMISSION STD VEHICLE CLASS			PECIAL FEATURES		
	JVGAR0:	25VAT		L	EV 2			LDT2			*		
					EMISSION C	REDIT	INFO	RMATION	· ·				
	NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY  NMOG CREDIT FOR NON ZERO-EVAP						I-PZEV NMOG CREDIT FOR DOR			<b>-</b>	OPTIONAL EXH. STD FOR WORK TRUCKS		
* N					N				N		N		
				NMOG	AND FLEET	ΓAVE	RAGI	INFORMA	TION				
NMO0 RAF	CH4 RAF	FTP NMOG/NMH6 RATIO	Н	CHO/NMHC RATIO	PC+LDT (	NMOG+NOX FLEET PC+LDT (0-3750 L\ (g/mi)			1		MOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (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).

day of November 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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FUEL TYPE			2DHS R	IG TEST	BI EED C	ANICTED
PRVR (g/gallon) @ UL 3DHS RIG T FUEL TYPE (g/test) @		) @ UL	2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4h	
	CERT	STD	CERT	STD	CERT	STD
*	*	*	*	*	*	*
ER STANDARI	O AND CERTIFICA		TION LEVEL (INC		HES)	
	* ER STANDAR	* * * ER STANDARD AND CE	* * * * * ER STANDARD AND CERTIFICA	* * * * * * * * * * * * * * * * * * *	* * * * *	CERT STD CERT STD CERT  * * * * * * * * *  ER STANDARD AND CERTIFICATION LEVEL (INCHES)

PZEV=partial allowance zero-emission vehicle; AT PZEV=advanced technology PZEV; TZEV=transitional zero-emission vehicle; TWC/OC=3-way/oxidizing catalyst; ADSTWC=adsorbing TWC; 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); HO2S/O2S=heated/oxygen sensor; WR-HO2S or AFS=wide rage/linear/heated air-fuel ratio sensor; NOXS= NOx 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=direct fuel injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD(F)/(P)(B)=full/partial/both 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

### 2018 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	MODEL VEH CLASS		TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
VOLKSWAGEN	TIGUAN LIMITED	LDT2	2.0	SA6	JVGAR0125VAT	1	P
VOLKSWAGEN	TIGUAN LIMITED 4MOTION	LDT2	2.0	SA6	JVGAR0125VAT	1	Р



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# **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

**FUEL TYPE** 

-		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	0.0371	0.040	0.93	1.7	0.023	0.05	1.0	8	*	*	
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.0433	0.055	0.93	2.1	0.027	0.07	1.2	11	0.003	0.01	
50°F @4K	GASOLINE - TIER 2 UNLEADED	0.0443	0.080	0.88	1.7	0.032	0.05	1.3	16			

1/	FUEL TYPE	NOx	(g/mi)	CO (g/mi)		
1.	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.007	0.07			
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.011	0.09			
20°F @ 50K	GASOLINE-COLD CO HIGH OCTANE			2.76	12.5	

## SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	1	COMPOSITE		
	FUEL TYPE	() - T	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	0.022	3.63		0.040	1.08			
		STD	0.25	10.5		0.27	3.5		100	-
		CERT	*	*	*	*	*	0.0570	*	*
@ UL	GASOLINE - TIER 2 UNLEADED	STD	*	*	*	*	*	0.097	*	*
		BIN	75-					0.110		

# WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE	VEHICLE	EVAPORA"	TIVE TESTI	NG		
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test)	@ UL	2DI	HS (g/test) @	D UL	RL (g/n	ni) @ UL
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
JVGAR0125VAT	GASOLINE - TIER 2 UNLEADED	0.410	0.65	*	0.500	0.85	*	0.000	0.05