

Executive Order: A-010-2119

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

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Pursuant to the authority vested in California 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: That 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	OUP IN	IFORM	MATION					
MODE	- 1 11	EST GROUP		VEHIC	LE CLASS(E				ATEGORY			FUEL TYPE	
2019		MXD06.27BC			MDV5		1	FLEX-FUEL VEHICLE (FFV)			85% ETHANOL, GASOLINE		
	USEFUL	LIFE (miles)						FDIATE IN-USE STD					
	I/ORVR	EVAF	•	┥┝	FTP		SF1		FT		SFTP		
15	150000 150000		0	LEV3	ULEV270	UC (LA92		73 ULEV OT1435 92), SC03, SST CYCLE)				*	
SPE	CIAL FE	ATURES & E SY	XHAL		ON CONTRO	L		OBD S	TATUS		ENG	GINE DISPLACEMENT (L)	
1		2TWC, 2WR	-но2	s, 2H02s,	SFI			FULL	*				
*			,	r			P	ARTIAL	ALL MODELS			6.2	
*	*							TIAL WITH	*				
		E	VAP	ORATIVE &	REFUELING	(EVA	P/OR	/R) FAMILY	INFORMAT	ION			
EVA	P / ORV	R FAMILY	EV	APORATIVE	STD CATE	GORY	,		SSION STD E CLASS		SP	ECIAL FEATURES	
F	KFMXF02	50NBS		L	LEV 2			MI	)V5			*	
F	KFMXF03	15NBS		LEV 2				MDV5				*	
F	KFMXR02	50NBS		L	LEV 2			MDV5			*		
F	KFMXR03	15NBS		L	EV 2			MI	v5			*	
	-				EMISSION C	REDIT	INFO	RMATION					
	EDIT FO	X FLEET AVE OR EXTENDED RRANTY			REDIT FOR N ZERO-EVAP	ON-P	ZEV NMOG CREDIT FOR DOR			DOR	OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N				N			N	
				NMOG	AND FLEET	AVE	RAGE	INFORMA	TION				
NMOG RAF	MOG CH4 NMOG/NMHC		CHO/NMHC RATIO (ASOLINE)	O LDT (3751 LVW-8500		500 G\	NMOG+NOX FLEET S GVW) MDV (8501-10000 GVV (g/mi)						
*	*	1.10		*		*			*		*		
				4 1 5			<u> </u>	5: 1				tral Custama Dhasa	

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 fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c)(3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV 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 June 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division



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### **ATTACHMENT**

### **EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS**

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**

			G+NOx mi)		O mi)	No (g/i		HCHO (mg/mi)			M mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	E85-EPA (GASOLINE- TIER3 E10)	0.244 (0.241)	0.270 (0.270)	2.8 (3.5)	4.2 (4.2)	* (*)	* (*)	2 (*)	6 (6)	0.000	0.010
50°F @4K	E85-EPA	0.221	0.675	0.8	4.2	*	*	3	20	1	1

	FUEL TYPE	NMOG+N	lOx (g/mi)	co	(g/mi)	
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	E85-EPA (GASOLINE-TIER3 E10)	0.162 (0.195)	0.270 (0.270)			
20°F @ 50K	*			*	*	

#### SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

15-16-16				US06		SC03		COM	POSITE	
	FUEL TYPE	1	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMOG+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*		*	*			
e		STD	*	*		*	*		СО	1 1 1 1
		CERT	*	*	*	*	**	0.276	2.5	2
@ UL	E85-EPA	STD	*	*	*	*	*	0.550	6.0	7
		BIN						*		
		CERT	*	*	*	*	*	0.243	3.8	1
@ UL	GASOLINE- TIER3 E10	STD	*.	.*	*	*	*	0.550	6.0	7
		BIN	4		2			*	2.5	V.Z.

#### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE							
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test) (	@ UL	2DI	HS (g/test) @	) UL	RL (g/mi) CERT 0.00 0.00 0.00	i) @ UL	
		CERT	STD	FEL	CERT	STD	FEL		STD	
KFMXF0250NBS	E10-EPA	0.53	1.00	*	*	1.25	*	0.00	0.05	
KFMXF0315NBS	E10-EPA	0.44	1.00	*	*	1.25	*	0.00	0.05	
KFMXR0250NBS	E10-EPA	0.53	1.00	*	*	1.25	*	0.00	0.05	
KFMXR0315NBS	E10-EPA	0.44	1.00	. *	*	1.25	*	0.00	0.05	



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				FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS R (g/test	IG TEST ) @ UL	2DHS RIG TEST (g/test) @ UL		BLEED CANISTI TEST (g/test) @			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
KFMXF0250NBS	E10-EPA	*	*		*	*	*	*	*	*		
KFMXF0315NBS	E10-EPA	*	*	*	*	***	*	*	*	*		
KFMXR0250NBS	E10-EPA	0.04	0.20	*	*	*	*	*	*	*		
KFMXR0315NBS	E10-EPA	0.04	0.20	*	*	*	*	*	*	*		
	EFFECTIVE	LEAK D	IAMET	ER STANDARI	D AND CE	RTIFICA	TION LEV	EL (INCH	IES)			
EVAPORATIVE	FAMILY	LEA	KFAMIL	Υ .	CE	RT			STD			

the notapplicable; #: 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; 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: semi-automatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission; AMS: automated manual-selectable transmission; OT: other transmission; AER: all-electric range; EAER: equivalent AER; PHEV: plug-in hybrid electric vehicle

## 2019 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH	OBD
FORD	F350 2WD BED DELETE FFV	MDV5	6.2	SA6	KFMXF0250NBS	1	P
FORD	F350 2WD BED DELETE FFV	MDV5	6.2	SA6	KFMXF0315NBS	1	P
FORD	F350 4WD BED DELETE FFV	MDV5	6.2	SA6	KFMXF0250NBS	1	P
FORD	F350 4WD BED DELETE FFV	MDV5	6.2	SA6	KFMXF0315NBS	1	P
FORD	F350 PICKUP 2WD FFV	MDV5	6.2	SA6	KFMXR0250NBS	1	P
FORD	F350 PICKUP 2WD FFV	MDV5	6.2	SA6	KFMXR0315NBS	1	P
FORD	F350 PICKUP 4WD FFV	MDV5	6.2	SA6	KFMXR0250NBS	1	P
FORD	F350 PICKUP 4WD	MDV5	6.2	SA6	KFMXR0315NBS	1	P