

Executive Order: A-010-2041-1 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 1 of 5

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	UP INFO	RMA	TION					
MODE	- I TE	ST GROUP		VEHIC	LE CLASS(E	S)		FUEL C	ATEGORY		FUEL TYPE		
2018	JF	MXT03.54JK			LDT4		DEDICATED SINGLE FUEL VEHICLE				GASOLINE		
l	JSEFUL	LIFE (miles)		VEH	ICLE EMISS	ION CAT	EGOF	RY	INTERIM / IN	TER	ERMEDIATE IN-USE STD		
EXH	ORVR	EVAP			FTP		SFTP		FTP		SFTP		
15	0000	150000		LEV3	ULEV70	LEV 3	COMP	OSITE	NMOG+NC	x	*		
SPE	CIAL FE	ATURES & EX	HAUS'		ON CONTRO	L		OBD S	TATUS	E	NGINE DISPLACEMENT (L)		
1	1 2TWC, DFI, SFI, 2WR-HO2S, 2HO2S, 2TC, CAC FULL *												
*	* * PARTIAL ALL MO							ALL MODELS		3.5			
*	* PARTIAL WITH * FINES								*				
	EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION												
EVA	P / ORV	R FAMILY	EVAP	ORATIVE	STD CATE	GORY		EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
J	FMXR02	00GDG	LE	V 3 OPTI	ON2 WITH	FEL		LDT4			HCT		
J	FMXR02	MXR0260NDG		LEV 3 OPTION2 WITH FEL			LDT4				HCT		
J	FMXR02	60NDP	LE	LEV 3 OPTION2 WITH FEL LDT4			HCT						
				E	EMISSION C	REDIT IN	FORM	MATION					
	EDIT FO	X FLEET AVE. OR EXTENDED RRANTY			EDIT FOR N ZERO-EVAP		v ,	NMOG C	REDIT FOR DO	R	OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N				N		N		
				NMOG	AND FLEET	T AVERA	GE IN	IFORMA	TION				
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO						(3751 LVW-850					
*	*	1.10		*		*			*		*		

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.



Executive Order: A-010-2041-1

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

Page 2 of 5

#### 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 for PC, LDT and MDV).

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

This Executive Order hereby supersedes Executive Order A-010-2041 dated June 16, 2017.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed at El Monte, California on this

\_ day of February 2018

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division



Executive Order: A-010-2041-1
New Passenger Cars, Light-Duty Trucks and
Medium-Duty Vehicles
Page 3 of 5

## **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

		NMOG (g/r		(g/i		NC (g/i		HC (mg		Pi (g/i	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*		*	*	*
FTP@UL	GASOLINE- TIER3 E10	0.0607	0.070	0.89	1.7	*	*	0.7	4	0.0013	0.01
50°F @4K	*	*	*	*	*	*	*	*	*		

	FUEL TYPE	NMOG+N	Ox (g/mi)	CO (	g/mi)
	FUEL TYPE	CERT	STD	ÇERT	STD
HWFET @ 50K	*		*		
HWFET @ UL	GASOLINE-TIER3 E10	0.0252	0.070		
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			0.83	12.5

SFTP EXHAUST	<b>EMISSION STAI</b>	NDARDS AND	CERTIFICATION	LEVELS

				US06		SC03	3	COMPOSITE		
	FUEL TYPE		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		•		*	*			-
0		STD	*	*		*	*			
		CERT	*	*	*	*	*	0.0466	0.72	*
@ UL	GASOLINE- TIER3 E10	STD	·	*	*	*	*	0.097	4.2	*
		BIN						0.100		

### WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE	NG	RL (g/mi) @ UL				
FAMILY	FUEL TYPE	3DHS (g/test) @ UL						2DI	HS (g/test) (
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
JFMXR0200GDG	GASOLINE- TIER3 E10	0.2989	0.500	0.500	*	0.500	0.500	0.000	0.05
JFMXR0260NDG	GASOLINE- TIER3 E10	0.2537	0.500	0.500	0.2084	0.500	0.500	0.000	0.05
JFMXR0260NDP	GASOLINE- TIER3 E10	0.2537	0.500	0.500	0.2084	0.500	0.500	0.000	0.05



Executive Order: A-010-2041-1

New Passenger Cars, Light-Duty Trucks and

Medium-Duty Vehicles

Page 4 of 5

ORVR / FUI	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	D CERT	STD		
JFMXR0200GDG	GASOLINE- TIER3 E10	0.028	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.0100	0.020		
JFMXR0260NDG	GASOLINE- TIER3 E10	0.014	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.0080	0.020		
JFMXR0260NDP	GASOLINE- TIER3 E10	0.01	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.0037	0.020		
	FFECTIVE	FAKD	IAMET	FR STANDARI	DAND CE	RTIFICAT	TION I EV	EL (INCH	ES)			

EFFECTIV	E LEAK DIAMETER STA	NDARD AND CERTIFICATION L	EVEL (INCHES)
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD
JFMXR0200GDG	JFMXR0200GDG-001	*	0.02
JFMXR0260NDG	JFMXR0260NDG-001	*	0.02
JFMXR0260NDP	JFMXR0260NDP-001	*	0.02

t; 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; 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

## 2018 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
FORD	F150 2WD BASE PAYLOAD LT TIRE	LDT4	3.5	SA	JFMXR0200GDG	1	P
FORD	F150 2WD BASE PAYLOAD LT TIRE	LDT4	3.5	SA	JFMXR0260NDG	1	P
FORD	F150 2WD BASE PAYLOAD LT TIRE	LDT4	3.5	SA	JFMXR0260NDP	1	P
FORD	F150 3.5L 2WD GVWR>7599 LBS	LDT4	3.5	SA	JFMXR0200GDG	1	P
FORD	F150 3.5L 2WD GVWR>7599 LBS	LDT4	3.5	SA	JFMXR0260NDG	1	P
FORD	F150 3.5L 2WD GVWR>7599 LBS	LDT4	3.5	SA	JFMXR0260NDP	1	P
FORD	F150 3.5L 4WD GVWR>7599 LBS	LDT4	3.5	SA	JFMXR0200GDG	1	P
FORD	F150 3.5L 4WD GVWR>7599 LBS	LDT4	3.5	SA	JFMXR0260NDG	1	P



Executive Order: A-010-2041-1
New Passenger Cars, Light-Duty Trucks and
Medium-Duty Vehicles
Page 5 of 5

## 2018 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	ECS	ОВЕ
FORD	F150 3.5L 4WD GVWR>7599 LBS	LDT4	3.5	SA	JFMXR0260NDP	1	P
FORD	F150 4WD BASE PAYLOAD LT TIRE	LDT4	3.5	SA .	JFMXR0200GDG	1	P
FORD	F150 4WD BASE PAYLOAD LT TIRE	LDT4	3.5	SA	JFMXR0260NDG	1	P
FORD	F150 4WD BASE PAYLOAD LT TIRE	LDT4	3.5	SA	JFMXR0260NDP	1	P
FORD	F150 PICKUP 2WD	LDT4	3.5	SA	JFMXR0200GDG	1	P
FORD	F150 PICKUP 2WD	LDT4	3.5	SA	JFMXR0260NDG	1 '	P
FORD	F150 PICKUP 2WD	LDT4	3.5	SA	JFMXR0260NDP	1	P
FORD	F150 PICKUP 4WD	LDT4	3.5	SA	JFMXR0200GDG	1	P
FORD	F150 PICKUP 4WD	LDT4	3.5	SA	JFMXR0260NDG	1	P
FORD	F150 PICKUP 4WD	LDT4	3.5	SA	JFMXR0260NDP	1	P

