

# FORD MOTOR COMPANY

Executive Order: A-010-2111

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.

VEAR   2019   RFMXJ03.5VEP   LDT3, PC   DEDICATED SINGLE FUEL   VEHICLE	FUEL TYPE  GASOLINE  DIATE IN-USE STD  SFTP  *		
USEFUL LIFE (miles)  EXH/ORVR  EVAP  150000  LEV2 ULEV  SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS  1 2TWC, TWC, 2H02S, DFI, 2TC, 2WR-H02S, CAC  *  *  EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION  EVAP / ORVR FAMILY  EVAPORATIVE STD CATEGORY  KFMXR0145GBA  LEV 2  VEHICLE  VEHICLE  VEHICLE  VEHICLE  VEHICLE  INTERIM / INTERIM / INTERIMED  A DBD STATUS  ENGIN	DIATE IN-USE STD		
EXH/ORVR EVAP FTP SFTP FTP  120000 150000 LEV2 ULEV LEV 2 SFTP *  SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS  1 2TWC, TWC, 2HO2S, DFI, 2TC, 2WR-HO2S, CAC FULL ALL MODELS  * * PARTIAL *  PARTIAL WITH *  EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION  EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY VEHICLE CLASS  KFMXR0145GBA LEV 2 PC			
120000 150000 LEV2 ULEV LEV 2 SFTP STANDARD *  SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS  1 2TWC, TWC, 2H02S, DFI, 2TC, 2WR-H02S, CAC FULL ALL MODELS  * * PARTIAL * PARTIAL WITH FINES *  EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION  EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS  KFMXR0145GBA LEV 2 PC	SFTP *		
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS  1 2TWC, TWC, 2H02S, DFI, 2TC, 2WR-H02S, CAC  *	*		
SYSTEMS  1 2TWC, TWC, 2H02S, DFI, 2TC, 2WR-H02S, CAC  *			
* * PARTIAL *  PARTIAL *  PARTIAL WITH *  FINES  EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION  EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS  KFMXR0145GBA LEV 2 PC	INE DISPLACEMENT (L)		
* * * PARTIAL WITH TINES *  EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION  EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS  KFMXR0145GBA LEV 2 PC			
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION  EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS  KFMXR0145GBA LEV 2 PC	3.5		
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY EVAP EMISSION STD VEHICLE CLASS  KFMXR0145GBA LEV 2 PC			
EVAP / ORVR FAMILY EVAPORATIVE STD CATEGORY VEHICLE CLASS  KFMXR0145GBA LEV 2 PC			
	SPECIAL FEATURES		
KFMXR0145GBC LEV 2 LDT3	*		
	*		
EMISSION CREDIT INFORMATION			
COPPUT FOR EVTENDED   TIMES TO THE TOTAL THE NIMOR COPPUT FOR DOOR	OPTIONAL EXH. STD FOR WORK TRUCKS		
N N N	N		
NMOG AND FLEET AVERAGE INFORMATION			
NMOG CH4 RAF NMOG/NMHC RATIO HCHO/NMHC RATIO NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)	MDV (10,001-14,000		
* * 1.04 * 0.072 0.083	GVVVK) (g/mi)		

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

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division



**FUEL TYPE** 

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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

		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	0.027	0.040	0.3	1.7	0.02	0.05	*	8	*	*
FTP@UL	GASOLINE - TIER 2 UNLEADED	0.040	0.055	0.6	2.1	0.02	0.07	*	11	*	0.01
50°F @4K	*	*	*	*	*	*	*	*	*		

	FUEL TYPE	NOx	(g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	GASOLINE - TIER 2 UNLEADED	0.00	0.07			
HWFET @ UL	GASOLINE - TIER 2 UNLEADED	0.01	0.09			
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE			0.6	10.0	

## SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	COMPOSITE		
	FUEL TYPE		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	0.02	0.2		0.02	0.4			
		STD	0.14	8.0		0.20	2.7			
		CERT	*	*	*	*	*	0.049	*	*
@ UL	GASOLINE - TIER 2 UNLEADED	STD	*	*	*	*	*	0.090	*	*
		BIN						0.080		

## WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY	FUEL TYPE		WHOLE \						
		3DHS (g/test) @ UL			2DI	HS (g/test) (	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
KFMXR0145GBA	GASOLINE - TIER 2 UNLEADED	0.30	0.50	*	0.34	0.65	*	0.00	0.05
KFMXR0145GBC	GASOLINE - TIER 2 UNLEADED	0.30	0.90	*	0.34	1.15	*	0.00	0.05



LINCOLN

MKT AWD

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EVAPORATIVE FAMILY				FUEL ONLY EVAP & CANISTER BLEED								
	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		
KFMXR0145GBA	GASOLINE - TIER 2 UNLEADED	0.02	0.20	*	*	*	*	*	*	*		
KFMXR0145GBC	GASOLINE - TIER 2 UNLEADED	0.02	0.20		*	*	*	*	*	*		
	EFFECTIVE I	EAK D	IAMET	ER STANDAR	D AND CE	RTIFICA	TION LEV	EL (INC	HES)			
EVAPORATIVE FAMILY LEAK FAMIL		Y CERT ,				STD						
* *		*	*				*					

\*: 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; GWWR; 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 **EVAPORATIVE** EXH VEH CLASS ENGINE (L) TRANS TYPE OBD MAKE MODEL FAMILY **ECS** FORD EXPLORER AWD LDT3 3.5 A6,SA6 KFMXR0145GBC 1 F FORD FLEX AWD PC 3.5 SA6 KFMXR0145GBA 1 F POLICE FORD INTERCEPTOR SEDAN PC 3.5 A6 KFMXR0145GBA 1 म AWD POLICE FORD INTERCEPTOR LDT3 3.5 KFMXR0145GBC F A6 1 UTILITY AWD TAURUS AWD FORD PC 3.5 SA6 KFMXR0145GBA 1 F

3.5

A6, SA6

KFMXR0145GBA

PC