## California Environmental Protection Agency

# **⊘** Air Resources Board

FORD MOTOR COMPANY

Executive Order: A-010-1915

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	INI	FOR	MATION					
MODEL YEAR		TEST G	ROUP		VEHICLE CLASS(ES)						FUEL C	Α	TEGORY		FUEL TYPE	
2016		GFMXV02	WLVE.				PC		DEDICATED SINGLE FUEL VEHICLE				GASOLINE			
U	SEF	JL LIFE	(miles)		1	/EHIC	CLE EMISS	ION	C	ATE	GORY		INTERIM / IN	TE	RMEDIA	TE IN-USE STD
EXH/C	ORVI	R	EVAP			F1	ГР			SF	TP	Г	FTP			SFTP
150	000		150000		LE	EV3 T	JLEV70	LE	V :	3 C	OMPOSITE	Г	NMOG+NO	x		NMOG+NOX
SPEC	IAL	FEATUR		HAUS TEMS		SIOI	N CONTRO	L ·			OBD S	TA	TUS		ENGINE	DISPLACEMENT (L)
1		TWC, W	R-HO2S,	HO25	S, TC,	CAC	C, DFI		11		FULL		*	7		
*				*					11	F	PARTIAL		*			2.3
*				*						PAF	TIAL WITH		ALL MODELS			
			E۱	/APO	RATIVE	& R	EFUELING	(EV	ΑF	P/OR	VR) FAMILY	<u> </u>	NFORMATIO	N		
EVAP	/ OF	RVR FA	AILY	EVA	PORAT	IVE S	STD CATE	GORY EVAP EMISSION STD VEHICLE CLASS				SPECIA	L FEATURES			
GF	MXR	0125NB	7			LEV	V 2	2 PC				*				
						ΕN	MISSION C	RED	ΙT	INF	ORMATION					
		ALLOW	ANCE FO	OR TE	ST GR	OUP		N			CREDIT FO			RE OF		OPTIONAL EXH. STD FOR WORK
BASEL	INE	PZEV	AT	PZEV	<u>'</u>		TZEV									TRUCKS
	*			*			*				И			N		N
					NM	IOG A	AND FLEET	AV	EF	RAG	E INFORMA	ΤI	ON			
NMOG RAF CH4 RAF FTP NMOG/NMHC RATIO				HCHO/NM	HCHO/NMHC RATIO		NMOG+NOX FL PC+LDT (0-375 (g/mi)		0-3750 LVW)		LDT (3	G+NOX FLEET STD T (3751 LVW-8500 WR) + MDPV (g/mi)				
*		*		1.	10			*				0	. 093			0.110

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 for PC, LDT and MDV).

#### BE IT FURTHER RESOLVED:

The listed vehicle models are conditionally certified in accordance with 13 CCR Section 1968.2(k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the on-board diagnostic II (OBD) system of the listed vehicle models has been determined to have fifteen deficiencies for models with manual transmission and fourteen deficiencies for models with automatic transmission. The listed vehicle models are approved subject to the manufacturer paying a fine of \$500 per vehicle for the third through fifteenth deficiencies for vehicles with manual transmission and a fine of \$450 per vehicle for the third through fourteenth deficiencies for vehicles with automatic transmission in the listed test group that are produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to the Air Resources Board reports of the number of vehicles produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2016 model-year production period. Failure to pay the quarterly fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all vehicles covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$5000 per vehicle pursuant to HSC Section 43154.

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 July 2015.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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## **ATTACHMENT**

EXHAUST AND EVAPORATIVE EMISSION STANDARDS	S 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+NOx CO NOx HCHO PM

		NMOG (g/i	i+NOx mi)		O mi)		Ox mi)	HC (mg	HO /mi)	1	M mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.0610	0.070	0.58	1.7	*	*	*	4	*	0.01
50°F @4K	GASOLINE- LEV3 E10	0.0511	0.140	0.40	1.7	*	*	*	16		

	FUEL TYPE	NMOG+1	NOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	. *	*	*	Control of the contro		
HWFET @ UL	GASOLINE-LEV3 E10	0.0302	0.070	7 : 1 : 1 : 1 : 1 : 1		
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE			1.12	10.0	

## SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

				US06		SC03	3	CON	IPOSITE	
	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)
0.41/	*	CERT	*	*		*	*			
@ 4K		STD	*	*		*	*	-	-,-	
		CERT	*	*	*	*	*	0.064	0.7	*
@ UL	GASOLINE- LEV3 E10	STD	*	*	*	*	*	0.110	4.2	*
-	2273 220	BIN		in Sign				0.090		

## WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test)	@ UL	2DI	HS (g/test) (	D UL	RL (g/r	ni) @ UL
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
GFMXR0125NBV	GASOLINE - TIER 2 UNLEADED	0.42	0.50	*	0.233	0.65	*	0.002	0.05

### 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	2DHS R (g/test		BLEED C TEST (g/t	ANISTER est) @ 4K		
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD		
GFMXR0125NBV	GASOLINE - TIER 2 UNLEADED	0.01	0.20	*	*	*	*	*	*	*		

automated manual-selectable transmission; OT: other transmission

: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: DT<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; 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; 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 sparkignited 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:

## 2016 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
FORD	MUSTANG	PC	2.3	M6,SA6	GFMXR0125NBV	1	\$	*
FORD	MUSTANG CONVERTIBLE	PC	2.3	M6,SA6	GFMXR0125NBV	1	\$	*