## California Environmental Protection Agency

**OB** Air Resources Board

MAZDA MOTOR CORPORATION

Executive Order: A-016-0429

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 GROUP INFORMATION											ı						
MODI YEA		TEST G	ROUP	VEHICLE CLASS(ES)				FUE	FUEL CATEGORY				FUEL TYPE				
201	6	GTKXV02	2.5ND2				PC			DEDICA		SII HIC	ngle fuel Le	GASOLINE			
	USEFUL LIFE (miles) VEHICLE EMISSIO						ION	CA	TEGORY	EGORY INTERIM / INTERMEDIATE IN-U					TE IN-USE STD		
EXI	H/ORV	R	EVAP			FT	P			SFTP			FTP		T	SFTP	
1	50000		150000		LEV	V3 S1	ULEV30	LEV	7 3	COMPOSIT	ľE		*			NMOG+NOX	
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS								L	Ī	ОВ	D S	TAT	us	EN	GINE	DISPLACEMENT (L)	
1		WU-TW	C, TWC,	WR-HC	)2S, E	102S	, DFI			FULL		AI	L MODELS				
*				*			. 3			PARTIAL			*		2.5		
*	*							F	PARTIAL W	ITH		* .					
			ΕV	APOR	ATIVE	& R	EFUELING	(EV	AP	/ORVR) FAI	MILY	/ INF	ORMATION	ı			
EV	AP / OF	RVR FAI	MILY	EVAP	ORAT	IVE S	STD CATE	TEGORY EVAP EMISSION STD VEHICLE CLASS			SF	SPECIAL FEATURES					
	GTKXR	0125GC	K			LEV	7 2			PC HCT			HCT				
			i			EN	IISSION CI	REDI	ΤI	NFORMATI	ON						
ALLOWANCE FOR TEST GROUP								NIMOR COEDIT FOR I NIMOR COEDIT FOR I			OPTIONAL EXH. STD FOR WORK						
BAS	BASELINE PZEV AT PZEV					TZEV									TRUCKS		
ALL MODELS * *								N			1	N	i n				
NMOG AND FLEET AVERAGE INFORMATION																	
NMO	3 RAF	RAF CH4 RAF FTP NMOG/NMHC HCHO/NMHC			HC F	RA'		NMOG+NOX FLEET STD NMOG+NOX FLE PC+LDT (0-3750 LVW) LDT (3751 LVV (g/mi) GVWR) + MDP\			751 LVW-8500						
,	*	*		1.1	LO			*				0.0	93		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 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 May 2015.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

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# **ATTACHMENT**

	<b>EXHAUST AND</b>	<b>EVAPORATIVE</b>	<b>EMISSION STANDARDS</b>	S AND CERTIFICATION LEVEL	S
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	EXHAUS	TEMISSION 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 diumal+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
61	IEI TYPE	

200	JEL	<b>T</b> \/	DE
F-1	11		-

Section of the second		NMOG	+NOv	CO NOx			НС	но	PM		
		(g/mi)		(g/mi)		(g/mi)		(mg/mi)		(g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.0179	0.030	0.14	1.0	*	*	*	4	*	0.01
50°F @4K	GASOLINE- LEV3 E10	0.035	0.060	0.2	1.0	*	*	*	8		No.

	FILE TVDE	NMOG+	NOx (g/mi)	CO (g/mi)		
	FUEL TYPE	CERT	STD	CERT	STD	
HWFET @ 50K	*	*	*			
HWFET @ UL	GASOLINE-LEV3 E10	0.0046	0.030			
20°F @ 50K	GASOLINE-COLD CO LOW OCTANE			0.22	10.0	

## SFTP EXHAUST EMISSION STANDARDS 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)	
- "		CERT	*	*		*	*				
@ 4K	*	STD	*	*		*	*				
		CERT	*	*	*	*	*	0.0149	0.24	*	
@ UL	GASOLINE- LEV3 E10	STD	*	*	*	*	*	0.110	4.2	*	
	IMVS EIO	BIN		1 1				0.040		A DESERVE	

## WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

	FUEL TYPE		WHOLE						
EVAPORATIVE FAMILY		3DH	S (g/test) (	D UL	2D	HS (g/test) (	RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
GTKXR0125GCX	GASOLINE-CA PHASE 2	0.193	0.35	*	*	0.35	*	0.000	0.05

# ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

				FUEL ONLY EVAP & CANISTER BLEED									
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE		IG TEST ) @ UL	2DHS R (g/test		BLEED CANISTER TEST (g/test) @ 4K				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
GTKXR0125GCX	GASOLINE - TIER 2 UNLEADED	0.009	0.20	GASOLINE - CA PHASE 2	0.04	0.0	*	0.0		*			

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: 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 (beit 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%"qasoline) 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

2016 MODEL YEAR: VEHICLE MODELS INFORMATION										
	MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE	
	MAZDA	MAZDA3	PC	2.5	SA6	GTKXR0125GCX	1	F	PZEV	