

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											
MODEL YEAR		TEST GROUP		VEHICLE CLASS(ES)		FUEL CATEGORY		FUEL TYPE			
2017		HBMXV02.0M46		PC		DEDICATED SINGLE FUEL VEHICLE		GASOLINE			
USEFUL LIFE (miles)			VEHICLE EMISSION CATEGORY				INTERIM / INTERMEDIATE IN-USE STD				
EXH/ORVR		EVAP		FTP		SFTP		FTP		SFTP	
150000		150000		LEV3 SULEV30		LEV 3 COMPOSITE		*		PM	
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS					OBD STATUS				ENGINE DISPLACEMENT (L)		
1	WU-TWC, TWC, WR-HO2S, HO2S, DFI, TC, CAC				FULL		*		2.0		
*	*				PARTIAL		ALL MODELS				
*	*				PARTIAL WITH FINES		*				
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION											
EVAP / ORVR FAMILY			EVAPORATIVE STD CATEGORY			EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
HBMXR0100F5X			LEV 3 OPTION2 WITH FEL			PC			HCT		
HBMXR0130F45			LEV 3 OPTION2 WITH FEL			PC			HCT		
EMISSION CREDIT INFORMATION											
ALLOWANCE FOR TEST GROUP					NMOG CREDIT FOR NON-PZEV ZERO-EVAP		NMOG CREDIT FOR DOR		OPTIONAL EXH. STD FOR WORK TRUCKS		
BASELINE PZEV		AT PZEV		TZEV							
ALL MODELS		*		*	N		N		N		
NMOG AND FLEET AVERAGE INFORMATION											
NMOG RAF	CH4 RAF	FTP NMOG/NMHC RATIO		HCHO/NMHC RATIO		NMOG+NOX FLEET STD PC+LDT (0-3750 LVW) (g/mi)		NMOG+NOX FLEET STD LDT (3751 LVW-8500 GVWR) + MDPV (g/mi)		NMOG+NOX FLEET STD MDV (10001-14000 GVWR) (g/mi)	
*	*	1.10		*		0.086		0.101		*	

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.

**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.

This Executive Order hereby supersedes Executive Order A-008-0416-1 dated July 11, 2016.

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

Executed at El Monte, California on this 13<sup>th</sup> day of September 2016.

*M. Annette Hebert*  
FOR Annette Hebert, Chief  
Emissions Compliance, Automotive Regulations and Science Division

**ATTACHMENT****EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS****EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)**

	FUEL TYPE	CH <sub>4</sub> : methane; NMOG: non-CH <sub>4</sub> organic gas; HC: hydrocarbon; NMHC: non-CH <sub>4</sub> HC; CO: carbon monoxide; NO <sub>x</sub> : 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+NO <sub>x</sub> (g/mi)		CO (g/mi)		NO <sub>x</sub> (g/mi)		HCHO (mg/mi)		PM (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.)	0.011	0.030	0.4	1.0	*	*	*	4	0.000	0.003
50°F @4K	TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.)	0.036	0.060	0.6	1.0	*	*	*	8		

	FUEL TYPE	NMOG+NO <sub>x</sub> (g/mi)		CO (g/mi)	
		CERT	STD	CERT	STD
HWFET @ 50K	*	*	*		
HWFET @ UL	TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.)	0.004	0.030		
20°F @ 50K	COLD CO E10 REGULAR GASOLINE			1.2	10.0

**SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS**

	FUEL TYPE		US06			SC03		COMPOSITE		
			NMOG+NO <sub>x</sub> (g/mi)	CO (g/mi)	PM (mg/mi)	NMOG+NO <sub>x</sub> (g/mi)	CO (g/mi)	NMOG+NO <sub>x</sub> (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*		*	*			
		STD	*	*		*	*			
@ UL	TIER 3 E10 REGULAR GASOLINE (9 RVP @LOW ALT.)	CERT	*	*	6	*	*	0.012	0.7	*
		STD	*	*	10	*	*	0.103	4.2	*
		BIN						0.050		

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

EVAPORATIVE FAMILY	FUEL TYPE	WHOLE VEHICLE EVAPORATIVE TESTING						RL (g/mi) @ UL	
		3DHS (g/test) @ UL			2DHS (g/test) @ UL				
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
HBMXR0100F5X	GASOLINE- LEV3 E10 PREM	0.270	0.300	0.300	0.228	0.300	0.300	0.04	0.05
HBMXR0130F45	GASOLINE- TIER3 E10	0.198	0.300	0.275	0.126	0.300	0.275	0.01	0.05

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

EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL ONLY EVAP & CANISTER BLEED					
				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	
HBMXR0100F5X	GASOLINE- TIER3 E10	0.04	0.20	GASOLINE- LEV3 E10 PREM	*	*	*	*	0.009 0.020
HBMXR0130F45	GASOLINE- TIER3 E10	0.04	0.20	GASOLINE- LEV3 E10	*	*	*	*	0.003 0.020

\*: 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: medium-duty 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; 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 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; 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

**2017 MODEL YEAR: VEHICLE MODELS INFORMATION**

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
MINI	MINI COOPER S CLUBMAN	PC	2.0	M6,SA8	HBMXR0130F45	1	P	PZEV
MINI	MINI COOPER S CLUBMAN ALL4	PC	2.0	M6,SA8	HBMXR0130F45	1	P	PZEV
MINI	MINI COOPER S CONVERTIBLE	PC	2.0	M6,SA6	HBMXR0100F5X	1	P	PZEV
MINI	MINI COOPER S COUNTRYMAN	PC	2.0	SA8	HBMXR0130F45	1	P	PZEV
MINI	MINI COOPER S COUNTRYMAN ALL4	PC	2.0	M6,SA8	HBMXR0130F45	1	P	PZEV
MINI	MINI COOPER S HARDTOP 2 DOOR	PC	2.0	M6,SA6	HBMXR0100F5X	1	P	PZEV
MINI	MINI COOPER S HARDTOP 4 DOOR	PC	2.0	M6,SA6	HBMXR0100F5X	1	P	PZEV