

Executive Order: A-002-0234-2 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 1 of 4

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-19-095;

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 IN	FORI	MATION					
MODE YEAR	_   _ T	EST GROUP	ROUP VEHICLE CLASS(ES)					FUEL CATEGORY			FUEL TYPE		
2020	LF	JXJ02.5BUY		LDT1	, LDT2, PC	2	1		SINGLE FUEL HICLE		GASOLINE		
(	USEFUL	. LIFE (miles)		VEH	IICLE EMISS	ION C	ATEC	ORY	INTERIM / IN	TE	RMEDIATE IN-USE STD		
EXH	/ORVR	EVAP			FTP		SF	ГР	FTP		SFTP		
15	0000	15000	0	LEV3	SULEV30	LEV	3 CC	MPOSITE	*		PM		
SPE	CIAL FE	ATURES & EX	(HAU		ON CONTRO	L		OBD S	TATUS		ENGINE DISPLACEMENT (L)		
1	TWC (	2), WR-HO2S	, но	2S, DFI,	EGR, EGRC	1.		FULL	ALL MODELS	71			
*		***	*			À	Р	ARTIAL	*	2.0, 2.5			
*			*					TIAL WITH FINES	*				
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION													
EVA	P / ORV	R FAMILY	EVA	PORATIVE	STD CATE	GORY		EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
I	FJXR01	155AD	L	EV 3 OPTI	ON2 WITH	FEL	PC				HCT		
I	FJXR01	545GE	L	LEV 3 OPTION2 WITH FEL			LDT1				нст		
I	FJXR01	435DB	L	LEV 3 OPTION2 WITH FEL			PC			HCT			
				E	EMISSION C	REDIT	INFO	RMATION					
	EDIT FO	X FLEET AVE OR EXTENDED RRANTY			EDIT FOR N ZERO-EVAP		ZEV	NMOG CREDIT FOR DO			OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N				И		N .		
		a a		NMOG	AND FLEE	ΓAVE	RAGE	INFORMA	TION				
NMOG RAF	CH4 RAF	FTP NMOG/NMH0 RATIO		HO/NMHC RATIO			PC+LDT (0-3750 LVW)   LDT (3751 LVW-8500   MDV (1		T (3751 LVW-8500		NMOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)		
*	*	1.10		0.006	C	.065			0.074		*		
- 11				–					Eusinaia		Cantual Customas Dhasa		

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. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)



Executive Order: A-002-0234-2 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 2 of 4

## 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.

This Executive Order hereby supersedes Executive Order A-002-0234-1 dated June 24, 2019.

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

Executed at El Monte, California on this 23PD day of August 2019.

Allen Lyons, Chief

Emissions Certification and Compliance Division



Executive Order: A-002-0234-2 New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles Page 3 of 4

## **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

**FUEL TYPE** 

		NMOG+NOx (g/mi)		CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)		P <b>M</b> (g/mi)	
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- LEV3 E10	0.0143	0.030	0.46	1.0	*	*	0.0	4	0.0005	0.003
50°F @4K	GASOLINE- LEV3 E10	0.0182	0.060	0.41	1.0	*	*	0.0	8		

	FUEL TYPE	NMOG+N	* *	CO (	g/mi)
	FOEL TIPE	CERT	STD	CERT	STD
HWFET @ 50K	*	*	*		
HWFET @ UL	GASOLINE-LEV3 E10	0.0040	0.030		
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)			0.71	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)
@ 4K	*	CERT	*	*		*	*			
		STD	*	*		*	*			
		CERT	*	*	0.2	*	*	0.0115	0.73	*
@ UL	GASOLINE- LEV3 E10	STD	*	*	6	*	*	0.083	4.2	*
		BIN						0.050		

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

			WHOLE \	/EHICLE	EVAPORA	2DHS (g/test) @ UL			
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test) (	@ UL	2DI	HS (g/test) (	@ UL	RL (g/n	1i) @ UL
T		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
LFJXR01155AD	GASOLINE- LEV3 E10	0.2532	0.300	0.300	0.1852	0.300	0.300	0.000	0.05
LFJXR01435DB	GASOLINE- LEV3 E10	0.1934	0.300	0.300	0.1706	0.300	0.300	0.000	0.05
LFJXR01545GE	GASOLINE- LEV3 E10	0.2412	0.300	0.300	0.2202	0.300	0.300	0.000	0.05



Executive Order: A-002-0234-2
New Passenger Cars, Light-Duty Trucks and
Medium-Duty Vehicles
Page 4 of 4

				3									
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 R (g/test	IG TEST ) @ UL		RIG TEST st) @ UL	BLEED C TEST (g/t			
	FUEL TYPE	CERT	STD			CERT	STD	CERT	STD	CERT	STD		
LFJXR01545GE	GASOLINE- TIER3 E10	10.005	0.20		GASOLINE- LEV3 E10		*	*	*	0.0136	0.020		
LFJXR01155AD	GASOLINE- TIER3 E10	10.009	0.20	GASOLINE- LEV3 E10		*	*	*	*	0.0148	0.020		
LFJXR01435DB	GASOLINE- TIER3 E10	0.005	0.20	GASOL LEV3	E10	*	*	*	*	0.0182	0.020		
	FFECTIVE	LEAK D	IAMET	ER STA	NDAR	D AND CE	RTIFICA	TION LE	VEL (INCH	IES)			
EVAPORATIVE	FAMILY	LEA	K FAMII	LY	Y CERT				STD				
LFJXR0143	5DB	LFJXR0	1435DB	-5DB	DB *				0.02				
LFJXR0115	5AD	LFJXR0	LFJXR01155AD-5AD			*				0.02			
LFJXR0154	5GE	LFJXR0	1545GE	-5GE	2	* 0.02							

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; ŽEV: 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; HP/LP EGR: High/Low Pressure EGR; 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; a hyphen (-) between after treatment ECS indicates multiple functionalities of the after treatment device (ex. DPF-SCRC: SCR coated DPF); 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: sem -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; NMOG + NOx Fleet Ave. Credit for Extended Warranty: N = no credits, Y = credits, S = credits for some/select models

# 2020 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
SUBARU	CROSSTREK	LDT1	2.0	CV1,M6,SCV8	LFJXR01545GE	1	F
SUBARU	FORESTER	LDT2	2.5	CV1,SCV7	LFJXR01545GE	1	F
SUBARU	IMPREZA 4-DOOR	PC	2.0	CV1,M5,SCV7	LFJXR01155AD	1	F
SUBARU	IMPREZA 4-DOOR SPORT	PC	2.0	M5, SCV7	LFJXR01155AD	1	F
SUBARU	IMPREZA 5-DOOR	PC	2.0	CV1,M5,SCV7	LFJXR01155AD	1	F
SUBARU	IMPREZA 5-DOOR SPORT	PC	2.0	M5,SCV7	LFJXR01155AD	1	F
SUBARU	LEGACY	PC	2.5	SCV8	LFJXR01435DB	1	F
SUBARU	OUTBACK	LDT2	2.5	SCV8	LFJXR01435DB	1	F