



**CALIFORNIA**  
AIR RESOURCES BOARD

JAGUAR LAND ROVER  
LIMITED

Executive Order: A-409-0043-1  
New Passenger Cars, Light-Duty Trucks and  
Medium-Duty Vehicles  
Page 1 of 5

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: 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 GROUP INFORMATION						
MODEL YEAR	TEST GROUP	VEHICLE CLASS(ES)		FUEL CATEGORY	FUEL TYPE	
2018	JJLXJ03.0FSP	LDT2, 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 SULEV STAND-ALONE	PM	PM	
SPECIAL FEATURES & EXHAUST EMISSION CONTROL SYSTEMS			OBD STATUS		ENGINE DISPLACEMENT (L)	
1	2WR-HO2S, 2TWC, 2HO2S(2), DFI, SC, CAC		FULL	ALL MODELS	3.0	
*	*		PARTIAL	*		
*	*		PARTIAL WITH FINES	*		
EVAPORATIVE & REFUELING (EVAP/ORVR) FAMILY INFORMATION						
EVAP / ORVR FAMILY		EVAPORATIVE STD CATEGORY		EVAP EMISSION STD VEHICLE CLASS		SPECIAL FEATURES
JJLXR0160P1Z		LEV 3 OPTION2		PC		*
JJLXR0140P1Z		LEV 3 OPTION2		LDT2		*
EMISSION CREDIT INFORMATION						
NMOG+NOX FLEET AVE. CREDIT FOR EXTENDED WARRANTY		NMOG CREDIT FOR NON-PZEV ZERO-EVAP		NMOG CREDIT FOR DOR		OPTIONAL EXH. STD FOR WORK TRUCKS
N		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 (10,001-14,000 GVWR) (g/mi)
*	*	1.10	0.02	0.079	0.092	*

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 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:**

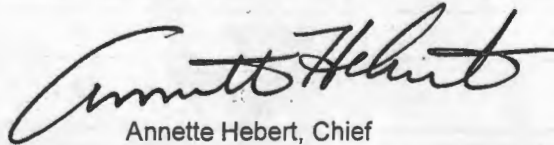
For the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and 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-409-0043 dated April 14, 2017.

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

Executed at El Monte, California on this 17 day of November 2017.



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	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 (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	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE-LEV3 E10	0.023	0.030	0.4	1.0	*	*	0	4	0.002	0.003
50°F @4K	GASOLINE-LEV3 E10	0.059	0.060	0.4	1.0	*	*	1	8		

	FUEL TYPE	NMOG+NOx (g/mi)		CO (g/mi)	
		CERT	STD	CERT	STD
HWFET @ 50K	*	*	*		
HWFET @ UL	GASOLINE-LEV3 E10	0.008	0.030		
20°F @ 50K	GASOLINE-LEV3 E10			1.3	10.0

**SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS**

	FUEL TYPE		US06			SC03		COMPOSITE		
			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	*	*		*	*			
@ UL	GASOLINE-LEV3 E10	CERT	0.033	0.5	0	0.009	0.6	*	*	*
		STD	0.050	9.6	10	0.020	3.2	*	*	*
		BIN						*		

**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
		CERT	STD	FEL	CERT	STD	FEL		
JJLXR0140P1Z	GASOLINE-LEV3 E10	0.227	0.400	*	*	0.400	*	0.00	0.05
JJLXR0160P1Z	GASOLINE-LEV3 E10	0.238	0.300	*	*	0.300	*	0.00	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	CERT	STD
JJLXR0160P1Z	GASOLINE - TIER 2 UNLEADED	0.01	0.20	GASOLINE-LEV3 E10	*	*	*	*	0.010	0.020
JJLXR0140P1Z	GASOLINE - TIER 2 UNLEADED	0.01	0.20	GASOLINE-LEV3 E10	*	*	*	*	0.018	0.020

**EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)**

EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD
JJLXR0160P1Z	JJLXR0160P1Z-001	*	0.02
JJLXR0140P1Z	JJLXR0140P1Z-001	*	0.02

\* =not applicable; 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; ECS= emission control system; CERT= certification; STD= standard; FEL= family emission limit; LVW=loaded vehicle weight; ALVW=adjusted LVW; LEV=low emission vehicle; ULEV=ultra LEV; SULEV=super ULEV; PZEV=partial allowance zero-emission vehicle; AT PZEV=advanced technology PZEV; TZEV=transitional zero-emission vehicle; TWC/OC=3-way/oxidizing catalyst; ADSTWC=adsorbing TWC; 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); HO2S/O2S=heated/oxygen sensor; WR-HO2S or AFS=wide range/linear/heated air-fuel ratio sensor; NOXS= NOx 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=direct fuel injection; TC/SC= turbo/super charger; CAC=charge air cooler; OBD(F)/(P)(B)=full/partial/both 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

**2018 MODEL YEAR: VEHICLE MODELS INFORMATION**

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
JAGUAR	F-PACE	LDT2	3.0	SA8	JJLXR0140P1Z	1	F
JAGUAR	F-PACE R	LDT2	3.0	SA8	JJLXR0140P1Z	1	F
JAGUAR	F-TYPE 400 SPORT AWD CONVERTIBLE	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE 400 SPORT AWD COUPE	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE 400 SPORT CONVERTIBLE	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE 400 SPORT COUPE	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE CONVERTIBLE	PC	3.0	M6, SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE COUPE	PC	3.0	M6, SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE S AWD CONVERTIBLE	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE S AWD COUPE	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE S CONVERTIBLE	PC	3.0	M6, SA8	JJLXR0160P1Z	1	F
JAGUAR	F-TYPE S COUPE	PC	3.0	M6, SA8	JJLXR0160P1Z	1	F



**2018 MODEL YEAR: VEHICLE MODELS INFORMATION**

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
JAGUAR	XE	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XE AWD	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XE S	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XE S AWD	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XF	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XF AWD	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XF S	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XF S AWD	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XF SPORTBRAKE S AWD	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XJ	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XJ AWD	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XJL	PC	3.0	SA8	JJLXR0160P1Z	1	F
JAGUAR	XJL AWD	PC	3.0	SA8	JJLXR0160P1Z	1	F
LAND ROVER	RANGE ROVER VELAR	LDT2	3.0	SA8	JJLXR0140P1Z	1	F