California Environmental Protection Agency

OB Air Resources Board

JAGUAR LAND ROVER LIMITED

Executive Order: A-409-0042

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 1 of 4

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 GR	OUP IN	FORMAT	TION						
MODE YEAR		TEST GROUP VEHIC				CLE CLASS(ES)			FUEL CATEGORY			FUEL TYPE		
2018	8 JJLXJ02.0STY				LDT2, PC			DEDICATED SINGLE FUEL VEHICLE			DIESEL			
	USEFUL	LIFE	(miles)	1	EHICLE EMIS	SION C	ATEGOR	Y	INTE	RIM / INT	ERMEDIA	TE IN-USE STD		
EXH/ORVR EVAP					FTP			SFTP		FTP		SFTP		
150000 *				LI	2V3 LEV160	3 LEV160 LEV 3 LE			DM DM		PM			
SPE	CIAL FE	ATUR		AUST EMIS	SION CONTRO	OL		OBD ST	TATUS		ENGINE	DISPLACEMENT (L)		
1 '	OC, DPF, SCRC, NOXS(2), WR-HO2S, PMS, DFI, TC, CAC, EGR, EGRC							FULL *						
*				*		PART	ΓIAL	ALL	L MODELS 2.0					
*				*				TAL WITH .						
			EV	APORATIVE	& REFUELING	G (EVA	P/ORVR)	FAMILY	INFO	RMATION				
EVA	P / ORV	R FAN	AILY	EVAPORAT	IVE STD CATE				AP EMISSION STD EHICLE CLASS		SPECIAL FEATURES			
*					*		*			*				
					EMISSION O	REDIT	INFORM	IATION						
	A	LLOW	ANCE FO	R TEST GR	OUP		IMOG CR			MOG CRE		OPTIONAL EXH STD FOR WORK		
BASE	LINE P	ZEV	AT	PZEV	TZEV	TZEV NON-		I-PZEV ZERO-EVAP		DO	R	TRUCKS		
	*			*	. *	* N			И			N		
				NM	OG AND FLEE	T AVE	RAGE IN	FORMAT	TION					
NMOG RAF	CH4 RAF				HO/NMHC RATIO NMOG+NOX F PC+LDT (0-3 (g/m			LDT (OG+NOX FLEET STD DT (3751 LVW-8500 /WR) + MDPV (g/mi)		MDV (10,001-14,000			
*	*	* 0.02 0.07					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.

California Environmental Protection Agency

Ø BAir Resources Board

JAGUAR LAND ROVER LIMITED

Executive Order: A-409-0042

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 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.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

⊘ Air Resources Board

JAGUAR LAND ROVER LIMITED Executive Order: A-409-0042

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 3 of 4

ATTACHMENT

							TTAC									
	EXHA										CERT			-		
	FUE			H4: metha noxide; I justment RVR [g H	ne; NMO NOx: oxid factor; 2 C/gallon	DG: non- des of nit DHS/3DH dispense	CH4 orga rogen; H0 IS [g HC/ d]: on-bo	nic gas; CHO: for test]: 2/s ard refu	HC: Imalde	nydrocai ehyde; F s diurnal vapor re	bon; NMF M: particu +hot-soak covery; g: lure; SFTF	IC: non-C late matte ; RL [g Ho gram; mg	H4 H0 er; RA C/mi]: p: millig	C; CO: ca F: reactive running le gram; mi:	rity oss;	
				NMHC+NOx (g/mi)			CO (g/mi)		NOx (g/mi)		HCHO (mg/mi)					
				CERT	STD	CERT	STE	O CE	ERT STD		CER	T ST	STD		STD	
FTP@5	TP@50K			*	*	*	*		*	*	*	*	STD (* .	
FTP@L	L DIES	SEL-I	EPA 0	.078	0.160	0.1	4.2		*	*	. 0	4		0.000	0.003	
50°F @	4K	*		*	*	*	*	1	*	*	*	*			-	
				FUEL TYPE					NMHC+NOx (g					CO (g/mi)		
									CERT		STD	(CERT		STD	
HWFET @ 50K					*				*		*	400	- *·. *			
HWFET @ UL				DIESEL-EPA					0.009		0.160	100	100			
20°F @ 50K				*									*		*	
			SF	TP EXH	UST EN	ISSION	STANDA	RDS A	ND C	ERTIFIC	ATION L	EVELS				
		US06							SC03				COMPOSITE			
	FUEL T	YPE	PE NA		NMHC+NOx (g/mi)		CO PM (g/mi) (mg/mi)		NMHC+NOx (g/mi)		(g/mi)			CO (g/mi)	PM (mg/mi	
@ 4K	. *	* CE		т . *					. *		*				3	
				*		*			*		*				-	
		ESEL-EPA ST		0.04		0.0 1 9.6 10			0.036		0.1	*		*	*	
@ UL	DIESEL			0.14	0.140		10		0.100		3.2			*	*	
		1001	BIN		V4.DOD	TD /E E	TIO CLONE	074415	4.55		EDTITIO					
	•	WH	OLE VE	HICLE							ERTIFIC	A HON LE	VELS		-	
	ORATIVE	F	UEL TY	PE 3DHS (g/test) @ UL					2DHS (g/test) @ UL			=	RL (g/m		i) @ UL	
FAMILY							TD FEL		ERT STD		FEL		CERT		STD	
*		+-	*		*	* .	*	*	*		*		*		*	
(RVR / F	UEL (ONLY / C	ANISTE	R BLEE	DEVAPO	RATIVE	EMISS	ION S	TANDA	RDS AND	CERTIF	ICATI	ON LEVE	LS	
		T						FUE	L ON	LY EVA	P & CAN	STER BL	EED			
EVAPORATIVE FAMILY			ORVR (g/gallon)	illon) @ UL		1		OHS RIG TEST g/test) @ UL			RIG TES				
		FU	EL TYP	YPE CERT STD		C		CER	ERT STD		CERT	STD	_	CERT	STD	
	*		*	*	*	*		*	*		*	*		* *		

California Environmental Protection Agency

@ Air Resources Board

JAGUAR LAND ROVER LIMITED

Executive Order: A-409-0042

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

Page 4 of 4

*: 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; 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; 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; 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: semiautomatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission: AMS: automated manual-selectable transmission: OT: other transmission

2018 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD	PZEV TYPE
JAGUAR	JAGUAR F-PACE	LDT2	2.0	SA8	*	1	P	*
JAGUAR	JAGUAR XE	PC	2.0	SA8	*	1	P	*
JAGUAR	JAGUAR XE AWD	PC	2.0	SA8	*	1	P	*
JAGUAR	JAGUAR XF	PC	2.0	SA8	*	1	P	*
JAGUAR	JAGUAR XF AWD	PC	2.0	SA8	*	1	P	*
LAND ROVER	RANGE ROVER VELAR	LDT2	2.0	SA8	*	1	P	*