California Environmental Protection Agency

OB Air Resources Board

ROLLS-ROYCE MOTOR CARS, LTD.

Executive Order: A-048-0072 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.

	1				TEST GR	OUP	INFO	RMATION					
MODEL YEAR		EST G	ROUP	VI	HICLE CLASS(E	ES)		FUEL	FUEL CATEGORY			FU	EL TYPE
2018	JR	RGV06	5.8N74		PC			1	ED SI	NGLE FUEL		G.F	ASOLINE
l	JSEFUL	LIFE	(miles)		VEHICLE EMISS	SION	CAT	EGORY	INTERIM / IN			MEDIA	TE IN-USE STD
EXH/	ORVR		EVAP		FTP	T	;	SFTP	1	FTP			SFTP
150	0000		150000	I	EV3 ULEV125	LE	v 3	COMPOSITE		PM			PM
SPE	CIAL FE	ATUR		HAUST EM	ISSION CONTRO)L		OBD	STA	rus	E	NGINE	DISPLACEMENT (L)
1	2TWC	, 2WI	R-HO2S,	2HO2S, D	FI, 2TC, 2CAC	;	11	FULL		*			
*				. *				PARTIAL	A	LL MODELS		6	5.6, 6.7
*				*		_	P	ARTIAL WIT	Н	*			
			E۷	APORATI	/E & REFUELING	3 (EV	AP/	ORVR) FAM	ILY IN	FORMATION	l		
EVAF	P / ORV	RFAN	MILY	EVAPORA	TIVE STD CATE	GOR	RΥ		EMISSION STD SPECIAL FEATURES			L FEATURES	
J.	RRGR01	RRGR0170RR1		LEV 3	V 3 OPTION2 WITH FEL				PC				*
J.	RRGR01	70N6	3		LEV 2				PC				*
					EMISSION C	RED	IT IN	IFORMATIO	N				
	Α	ALLOWANCE F		ALLOWANCE FOR TEST GROUP NMOG CREDIT FOR							T FOR	OPTIONAL EXH. STD FOR WORK	
BASE	LINE P	ZEV	AT	PZEV	TZEV		ION-	PZEV ZERO	-EVA	P	OR		TRUCKS
	*			* ,	*			N		1	И		N
				N	MOG AND FLEE	TAV	ERA	GE INFORM	ATIC	N			
NMOG RAF	CH4 RAF	NMC	FTP G/NMHC RATIO	HCHO/NI RATIO	, PC+LDI		50 L	VW) LD	NMOG+NOX FLEET STD		(10,001-14,000		
*	*		1.10	*		0.07	9			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.

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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).

BE IT FURTHER RESOLVED:

For evaporative family JRRGR0170RR1, the manufacturer has attested to compliance with the 0.02 inch effective leak diameter standard in 13 CCR Section 1976(b)(1)(G)6 ["Effective Leak Diameter Standard And Procedure"].

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

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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FT)	, HWFET	, 50°F, 20°F)
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	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	

1 de 1		1	G+NOx mi)	C (g/i		N(g/i	Ox mi)	HC (mg		1	M mi)
0.5		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	*	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10	0.063	0.125	0.8	2.1	*	*	*	4	0.001	0.003
50°F @4K	GASOLINE- TIER3 E10	0.048	0.250	0.3	. 2.1	*	*	*	16	(*	-

Ly-	FUEL TYPE	NMOG+	CO (g/mi)		
11/4	FUEL TYPE	CERT	STD	CERT	STD
HWFET @ 50K	*	*	*	31.	
HWFET @ UL	GASOLINE-TIER3 E10	0.019	0.125		15 - 15 -
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)		WA Jelm	0.7	10.0

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

1		17251		US06		SC03	}	COM	POSITE	
	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	*	*		*	*			
@ 41.		STD	*	*		*	*			3-2
		CERT	*	*	4	*	*	0.059	0.7	*
@ UL	GASOLINE- TIER3 E10	STD	* *	*	10	*	*	0.097	4.2	*
		BIN			1.00		11-35	0.120	= -	133

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

			WHOLE						
EVAPORATIVE FAMILY	FUEL TYPE	3DH	S (g/test)	@ UL	2Di	HS (g/test) (@ UL	RL (g/m	ii) @ UL
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
JRRGR0170N63	GASOLINE - TIER 2 . UNLEADED	0.43	0.50	*		0.65	*	0.03	0.05
JRRGR0170RR1	GASOLINE- TIER3 E10	0.190	0.300	0.400	0.252	0.300	0.400	0.01	0.05

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ORVR / FUI	EL ONLY / CA	NISTER	BLEED	EVAPORATIVE	EMISSION	STANDA	RDS AND	CERTIFICA	ATION LEV	ELS			
				FUEL ONLY EVAP & CANISTER BLEED									
EVAPORATIVE FAMILY	ORVR (g/g	jallon) @) UL	FUEL TYPE		IG TEST) @ UL		IG TEST) @ UL	BLEED C TEST (g/t	ANISTER est) @ 4K			
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
JRRGR0170N63	GASOLINE - TIER 2 UNLEADED	0.01	0.20	*	*	*	*	*	*	*			
JRRGR0170RR1	GASOLINE- TIER3 E10	0.06	0.20	GASOLINE- TIER3 E10	*	*	*	*	0.012	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: 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
ROLLS ROYCE	DAWN	PC	6.6	SA8	JRRGR0170N63	1	P	*
ROLLS ROYCE	GHOST	PC	6.6	SA8	JRRGR0170N63	1	P	*
ROLLS ROYCE	GHOST EWB	PC	6.6	SA8	JRRGR0170N63	1	P	*
ROLLS ROYCE	PHANTOM	PC	6.7	SA8	JRRGR0170RR1	1	P	*
ROLLS ROYCE	PHANTOM EWB	PC	6.7	SA8	JRRGR0170RR1	1	P	*
ROLLS ROYCE	WRAITH	PC	6.6	SA8	JRRGR0170N63	1	P	*