



CUMMINS INC.

EXECUTIVE ORDER U-R-002-0737  
New Off-Road  
Compression-Ignition Engines

Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-19-095;

**IT IS ORDERED AND RESOLVED:** That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2020	LCEXL06.7AAR	6.7	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Selective Catalytic Reduction – Urea, Ammonia Oxidation Catalyst			Crane, Loader, Tractor, Dozer, Pump, Compressor, and Generator Set	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		FEL	N/A	0.30	N/A	N/A	N/A	N/A	N/A	N/A
		CERT	0.02	0.17	--	0.04	0.02	--	--	--

**BE IT FURTHER RESOLVED:** That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

**This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.**

Executed at El Monte, California on this 22<sup>ND</sup> day of November 2019.

Allen Lyons, Chief  
Emissions Certification and Compliance Division

**Engine Model Summary Template**

U-R-002-013T

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8/12/2019

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
LCEXL06.7AAR	3856:FR93814	QSB6.7	173@2300	82	63	620@1500	119	60	DDI,ECM,TC, <i>EGR, A/C, DOC, SCR-U, ANC</i>
LCEXL06.7AAR	3856:FR93885	QSB6.7	164@2300	79	61	540@1500	101	51	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR93815	QSB6.7	173@2200	84	62	620@1500	119	60	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR93886	QSB6.7	155@2200	77	57	496@1500	94	47	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR93816	QSB6.7	173@2100	85	61	620@1500	119	60	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR93887	QSB6.7	158@2100	81	58	620@1500	119	60	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR93888	QSB6.7	146@2100	75	53	620@1500	119	60	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR96039	QSB6.7	173@2200	85	64	560@2200	113	57	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR96469	QSB6.7	173@2300	83	64	606@1500	117	56	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR96470	QSB6.7	173@2100	86	61	606@1500	111	56	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR96471	QSB6.7	158@2100	99	60	606@1500	111	56	DDI,ECM,TC,
LCEXL06.7AAR	3856:FR96472	QSB6.7	146@2100	100	61	606@1500	118	60	DDI,ECM,TC, ✓