

CUMMINS INC.

EXECUTIVE ORDER U-R-002-0766New 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)				
2021	MCEXL06.7AAQ	6.7	Diesel 8000					
SPECIAL	FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION					
Cooler, Ele	nic Direct Injection, Turboo ectronic Control Module, P idation Catalyst, Selective Urea, Ammonia Oxidatio	eriodic Trap Oxidizer, Catalytic Reduction-	Crane, Loaders, Tractor, Dozer, Pum	p, Compressor				

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, 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	EMISSION		EXHAUST (g/kW-hr)					OPACITY (%)		
POWER CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 ≤ kW ≤ 560	Tier 4 Final	OPTIONAL STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.02	0.16		0.03	0.01			

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).

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-D" adopted October 20, 2005 and last amended October 25, 2012.

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 on this 2nd day of September 2020.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Engine Model Summary Template

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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 torqu	9.Emission Control leDevice Per SAE J1930
MCEXL06.7AAQ	5531:FR95272	B6.7	316@2500	159.1	112.7	1014@1500	193.7	98.0	DDI ECM TC
						<u> </u>			SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4833:FR95876	B6.7	300@2500	156.5	105.5	950@1500	180.1	91.1	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	5531:FR95877	B6.7	326@2200	159.0	112.6	1014@1500	193.6	98.0	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4833:FR95878	B6.7	310@2200	156.5	105.5	950@1500	180.1	91.1	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95273	B6.7	262@2500	155.8	94.6	996@1300	188.2	82.5	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95879	B6.7	260@2500	138.2	93.2	850@1500	157.3	79.6	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95880	B6.7	225@2500	109.2	81.0	700@1500	127.0	64.3	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95881	B6.7	200@2500	103.2	69.6	625@1500	113.2	57.3	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95882	B6.7	173@2500	96.3	65.0	625@1500	113.2	57.3	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95883	B6.7	280@2200	153.7	93.3	950@1500	178.6	90.4	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95884	B6.7	260@2200	153.7	93.3	996@1300	188.2	82.5	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95885	B6.7	225@2200	135.6	82.3	875@1300	162.6	71.3	DDI ECM TC
									SCR CAC AMOX DOC PTOX

Engine Model Summary Template

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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 torqi	9.Emission Control JeDevice Per SAE J1930
MCEXL06.7AAQ	4834:FR96072	B6.7	225@2200	135.6	82.3	875@1300	162.6	71.3	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR96429	B6.7	225@2200	112.5	75.9	770@1500	140.7	71.2	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95886	B6.7	200@2200	107.2	68.7	730@1300	134.2	58.8	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95887	B6.7	280@2000	138.2	93.2	850@1500	157.3	79.6	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	4834:FR95888	B6.7	250@2000	135.6	82.3	850@1500	157.3	79.6	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	5235:FR95889	B6.7	173@2200	96.3	65.0	650@1300	119.1	52.2	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	5235:FR96074	B6.7	173@2200	96.3	65.0	650@1300	119.1	52.2	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	5235:FR96073	B6.7	173@2200	157.4	58.4	826@1100	156.4	58.0	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	5235:FR95890	B6.7	155@2200	89.4	54.3	550@1300	101.3	44.4	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	5235:FR95891	B6.7	232@2000	113.5	76.6	700@1500	127.0	64.3	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	5235:FR95892	B6.7	195@2000	96.3	65.0	625@1500	113.2	57.3	DDI ECM TC
									SCR CAC AMOX DOC PTOX
MCEXL06.7AAQ	5235:FR95893	B6.7	225@1800	127.1	72.9	875@1300	162.6	71.3	DDI ECM TC
									SCR CAC AMOX DOC PTOX