



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-14-012;

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	LHZXL1.95C51	1.456, 1.951	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Periodic Trap Oxidizer, Diesel Oxidation Catalyst, Exhaust Gas Recirculation, Electronic Control Module, Turbocharger, Charge Air Cooler			Pump, Compressor, 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
19 ≤ kW < 56	Tier 4 Final	OPTIONAL STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT	--	--	3.5	0.8	0.003	--	--	--

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 at El Monte, California on this 15th day of April 2019.


Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

Detailed engine models summarization of the engine family LHZXL1.95C51



EPA Engine Family Name	Model Year	Engine Model	Engine Code	Rated engine power (kW)	Rated Speed (RPM)	Fuel Rate at Rated Speed (mm ³ /stroke)	Maximum Torque (N·m)	Speed at Maximum Torque (RPM)	Fuel Rate at Maximum Torque (mm ³ /stroke)	Maximum Test Speed (RPM)	Torque at Maximum Test Speed (N·m)	Maximum Engine Power (kW)	Intermediate Test Speed (RPM)	Lower Tolerance of Maximum Power (%)	Upper Tolerance of Maximum Power (%)	Emission Control System
LHZXL1.95C51	2020	3H50TICD	3H50TICD-C5-15-IFN	25.5	1500	50.5	162.3	1500	50.5	1500	162.3	43.7	NA	5.0	5.0	DDI, DPF, DOC, EGR, ECM, TC, CAC
LHZXL1.95C51	2020	3H50TICD	3H50TICD-C5-15-ICFN	22.5	1500	46.0	143.9	1500	46.0	1500	143.9	43.7	NA	5.0	5.0	DDI, DPF, DOC, EGR, ECM, TC, CAC
LHZXL1.95C51	2020	3H50TICD	3H50TICD-C5-18-IFN	31.3	1800	50.5	166.1	1800	50.5	1800	166.1	36.4	NA	5.0	5.0	DDI, DPF, DOC, EGR, ECM, TC, CAC
LHZXL1.95C51	2020	3H50TICD	3H50TICD-C5-18-ICFN	28.5	1800	47.0	151.2	1800	47.0	1800	151.2	43.0	NA	5.0	5.0	DDI, DPF, DOC, EGR, ECM, TC, CAC
LHZXL1.95C51	2020	4H50TICD	4H50TICD-C5-15-IFN	35.0	1500	50.5	222.8	1500	50.5	1500	222.8	40.3	NA	5.0	5.0	DDI, DPF, DOC, EGR, ECM, TC, CAC
LHZXL1.95C51	2020	4H50TICD	4H50TICD-C5-15-ICFN	31.0	1500	46.0	197.4	1500	46.0	1500	197.4	38.6	NA	5.0	5.0	DDI, DPF, DOC, EGR, ECM, TC, CAC
LHZXL1.95C51	2020	4H50TICD	4H50TICD-C5-18-IFN	41.0	1800	49.0	217.5	1800	49.0	1800	217.5	36.4	NA	5.0	5.0	DDI, DPF, DOC, EGR, ECM, TC, CAC
LHZXL1.95C51	2020	4H50TICD	4H50TICD-C5-18-ICFN	36.4	1800	44.0	193.1	1800	44.0	1800	193.1	35.3	NA	5.0	5.0	DDI, DPF, DOC, EGR, ECM, TC, CAC

All Models:
DDI, PTOX, DOC,
EGR, ECM, TC, CAC