



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.

Table with 5 columns: MODEL YEAR, ENGINE FAMILY, DISPLACEMENT (liters), FUEL TYPE, USEFUL LIFE (hours). Includes a section for SPECIAL FEATURES & EMISSION CONTROL SYSTEMS and TYPICAL EQUIPMENT APPLICATION.

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):

Table with columns: RATED POWER CLASS, EMISSION STANDARD CATEGORY, EXHAUST (g/kW-hr) (NMHC, NOx, NMHC+NOx, CO, PM), and OPACITY (%) (ACCEL, LUG, PEAK).

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.

Signature of Annette Hebert, Chief

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



Detailed engine models summarization of the engine family LH2XL1.95V51

EP4 Engine Family Name	Model Year	Engine Model	Engine Code	Rated engine power (kW)	Rated Speed (RPM)	Fuel Rate at Rated Speed (lms3/stroke)	Maximum Torque (N*m)	Speed at Maximum Torque (RPM)	Fuel Rate at Maximum Torque (lms3/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
LH2XL1.95V51	2020	3HS50TCD	3HS50TCD-V6-28-FINM	43.7	2800	52.0	203.0	2000	63.0	2800	149.0	43.7	2000	5.0	5.0	DDI DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	3HS50TCD	3HS50TCD-V6-28-FIN	43.7	2800	52.0	188.0	2100	59.0	2800	149.0	43.7	2100	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	3HS50TCD	3HS50TCD-V6-28-CHF	36.4	2800	43.5	188.0	1800	57.5	2800	124.1	36.4	1800	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	3HS50TCD	3HS50TCD-V6-27-FIN	42.0	2700	51.0	188.0	2000	58.0	2700	148.5	42.0	2000	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	3HS50TCD	3HS50TCD-V6-26-FIN	40.3	2600	49.5	188.0	1900	58.0	2600	148.0	40.3	1900	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	3HS50TCD	3HS50TCD-V6-25-FIN	38.6	2500	48.5	188.0	1800	58.0	2500	147.4	38.6	1800	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	3HS50TCD	3HS50TCD-V6-24-FIN	36.4	2400	47.0	188.0	1700	58.0	2400	144.8	36.4	1700	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	3HS50TCD	3HS50TCD-V6-23-FIN	35.3	2300	46.5	182.0	1600	58.0	2300	146.5	35.3	1600	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	4HS50TCD	4HS50TCD-V6-22-FIN	44.8	2200	44.5	238.0	1500	55.0	2200	194.5	44.8	1500	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	4HS50TCD	4HS50TCD-V6-23-FIN	46.9	2300	45.5	242.0	1600	55.0	2300	194.7	46.9	1600	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	4HS50TCD	4HS50TCD-V6-24-FIN	48.8	2400	46.0	242.0	1700	55.0	2400	194.2	48.8	1700	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	4HS50TCD	4HS50TCD-V6-25-FIN	50.8	2500	46.5	242.6	1800	55.0	2500	194.0	50.8	1800	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	4HS50TCD	4HS50TCD-V6-26-FIN	52.7	2600	47.5	242.9	1900	55.0	2600	193.6	52.7	1900	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	4HS50TCD	4HS50TCD-V6-27-FIN	54.8	2700	48.0	243.2	2000	55.0	2700	193.8	54.8	2000	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC
LH2XL1.95V51	2020	4HS50TCD	4HS50TCD-V6-28-FIN	55.4	2800	48.0	243.5	2100	55.0	2800	193.9	55.4	2100	5.0	5.0	DDI, DPF, DDC, EGR, ECU, TC, CAC

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