

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 engine and emission control system 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)
2019	KY9XL12.7DAA	12.7	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Engine Control Module, Smoke Puff Limiter, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst, Exhaust Gas Recirculation, Diesel Oxidation Catalyst (Except Engine Code DC13085A)			Crane, Loader, Tractor, Dozer, Pump, Compressor, Generator	

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
130 ≤ KW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.10	0.25	--	0.3	0.02	--	--	--

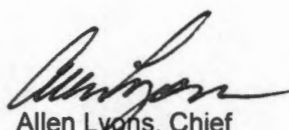
BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

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

This Executive Order hereby supersedes Executive Order U-R-024-0039 dated March 21, 2019.

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 21ST day of June 2019.



Allen Lyons, Chief
 Emissions Compliance, Automotive Regulations and Science Division

ATTACHMENT 1 OF 1

Engine ModelsEZ

U-R-024-0039-1

6/11/2019

Engine Family	1.Engine Code	2.Engine Model	3.Dis- placement	4.Power kW @RPM	5.Fuel Rate: mm/stroke @ peak HP	6.Fuel Rate: (lbs/hr) @ peak HP	7.Torque Nm @ RPM	8.Fuel Rate: mm/stroke@ peak torque	9.Fuel Rate: (lbs/hr)@ peak torque	10.Emission Control Device
KY9XL12.7DAA	DC13 084A	2722599	12.7	294 @ 2100	202	143	2157 @ 1200	289	117	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
KY9XL12.7DAA	DC13 084A	2722600	12.7	331 @ 2100	229	162	2255 @ 1300	301	132	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
KY9XL12.7DAA	DC13 085A	2722601	12.7	368 @ 2100	249	176	2373 @ 1300	312	136	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX
KY9XL12.7DAA	DC13 085A	2722602	12.7	405 @ 1900	291	196	2375 @ 1100	317	117	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX
KY9XL12.7DAA	DC13 087A	2245984	12.7	257 @ 1800	193	117	1600 @ 1300	218	95	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
KY9XL12.7DAA	DC13 087A	2258254	12.7	257 @ 2100	179	126	1748 @ 900	245	74	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
KY9XL12.7DAA	DC13 087A	2245985	12.7	283 @ 1800	208	147	1765 @ 1300	235	103	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
KY9XL12.7DAA	DC13 089A	2245986	12.7	257 @ 1800	193	117	1600 @ 1300	218	95	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
KY9XL12.7DAA	DC13 089A	2245987	12.7	283 @ 1800	212	128	1765 @ 1300	240	105	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX