

Pursuant to the authority vested in the 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)
2017	HY9XL12.7DAA	12.7	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Exhaust Gas Recirculation, Engine Control Module, Diesel Oxidation Catalyst (Except Engine Code DC13085A), Smoke Puff Limiter, Selective Catalytic Reduction-Urea, Ammonia Oxidation Catalyst			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	0.08	0.19	--	0.2	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 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 10 day of February 2017.



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

ATTACHMENT 1 OF 1

Engine ModelsEZ

U-R-024-0030

1/26/2017

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
HY9XL12.7DAA	DC13 084A	2133500	12.7	294 @ 2100	198	140	2157 @ 1200	290	117	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
HY9XL12.7DAA	DC13 084A	2133501	12.7	331 @ 2100	222	157	2255 @ 1300	307	134	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
HY9XL12.7DAA	DC13 085A	2133502	12.7	368 @ 2100	245	173	2373 @ 1300	325	142	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX
HY9XL12.7DAA	DC13 085A	2133503	12.7	405 @ 1900	344	220	2373 @ 1300	394	172	DDI, ECM, TC, CAC, EGR, SPL, SCR, AMOX
HY9XL12.7DAA	DC13 087A	2245984	12.7	257 @ 1800	193	117	1600 @ 1300	215	94	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
HY9XL12.7DAA	DC13 087A	2258254	12.7	257 @ 2100	175	123	1720 @ 1300	232	102	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
HY9XL12.7DAA	DC13 087A	2245985	12.7	283 @ 1800	211	128	1765 @ 1300	238	104	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
HY9XL12.7DAA	DC13 089A	2245986	12.7	257 @ 1800	193	117	1600 @ 1300	215	94	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX
HY9XL12.7DAA	DC13 089A	2245987	12.7	283 @ 1800	211	128	1765 @ 1300	238	104	DDI, ECM, TC, CAC, EGR, SPL, DOC, SCR, AMOX