

EXECUTIVE ORDER U-R-015-0168 New Off-Road

Compression-Ignition Engines

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-02-003;

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)		
2009	9VEXL12.9MLR	12.9	Diesel			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION				
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module			Generator and Other Industrial Equipment			

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), 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		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
225 ≤ kW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT			3.8	0.7	0.09	8	4	12

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

day of January 2009.

Annette Hebert, Chief

Mobile Source Operations Division

Figure Model Summary Template

9.Emission Control Device Per SAE J1930	DDI, TC, CAC, ECM			
8.Fuel Rate: (lbs/hr)@peak torque	Ϋ́	NA	NA	NA
7.Fuel Rate: mm/stroke@peak torque	351	246	246	228
6.Torque @ RPM (SEA Gross)	2350 @ 1400	2200 @ 1400	2000 @ 1400	1850 @ 1400
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	AN	AN	NA	NA
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM (for diesel only) (for diesels only) (SEA Gross)	253	224	203	182
- 1	532 @ 1900	494 @ 1900	449 @ 2100	405 @ 2100
3.BHP@RPM Engine Family 1.Engine Code 2.Engine Model (SAE Gross)	F3BE9681A*E 532 @ 1900	F3BE9681B*E 494 @ 1900	F3BE9681C*E 449 @ 2100	F3BE9681D*E 405 @ 2100
1.Engine Code	F3BE9681	F3BE9681	F3BE9681	F3BE9681
Engine Family	9VEXL12.9MLR	9VEXL12.9MLR	9VEXL12,9MLR	9VEXL12.9MLR

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1850 @ 1400

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