IVECO N.V.

EXECUTIVE ORDER U-R-015-0045 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)
2004	4VEXL05.9DGS	5.9	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT	APPLICATION
Direct Dies	sel Injection, Turbocharg Engine Control Mo	er, Charge Air Cooler, odule	Generator S	Set

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 POWER CLASS	EMISSION	EXHAUST (g/kw-hr)			OPACITY (%)					
	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
130 ≤ kW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	N/A	N/A	N/A
		CERT			5.8	0.8	0.07			

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 ____// TH ___ day of June 2003.

Aller Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form ATTACHHENT Pg 1.0←1

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IVECO NV Manufacturer:

Engine category: Nonroad Cl
EPA Engine Family: 4VEXL05.9DGS

Mfr Family Name: F4AE0685

New Submission Process Code:

8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930	DOU, EM. EC. TAA.	EC	EM. EC. TAA.	EM. EC. TAA.	
8.Fuel Rate: (lbs/hr)@peak tor	N/A	N/A	Z/A	Ϋ́	A/N
7.Fuel Rate: mm/stroke@peak torque	N/A	N/A	N/A	N/A	A/N
6.Torque @ RPM (SEA Gross)	841 @ 1800	822 @ 1500	763 @ 1800	656@1500	608 @ 1800
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	N/A	N/A	N/A	N/A	N/A
4.Fuel Rate: mm/stroke @ peak HP (for dlesel only)	162	157	148	125	120
3.BHP@RPM (SAE Gross)	288 @ 1800	235 @ 1500	261 @ 1800	188 @ 1500	208 @ 1800
1.Engine Code 2.Engine Model	F4AE0685A*F	F4AE0685D*F	F4AE0685B*F	F4AE0685F*F	F4AE0685E*F
1.Engine Code	N/A	A/N	N/A	N/A	N/A