YANMAR CO., LTD.

EXECUTIVE ORDER U-R-028-0326 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 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.

ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
7YDXL1.11U3N	1.116	Diesel	3000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION			
Indirect Diesel Inje	ection	Generator Set			
	7YDXL1.11U3N FEATURES & EMISSION	7YDXL1.11U3N 1.116	7YDXL1.11U3N 1.116 Diesel FEATURES & EMISSION CONTROL SYSTEMS TYPICAL EQUIPMENT		

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons 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				EXHAUST (g/kw-hr)				OPACITY (%)		
POWER STANDARD CLASS CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK	
8 ≤ kW < 19	Tier 2	STD	N/A	N/A	7.5	6.6	0.80	N/A	N/A	N/A
		CERT			5.8	0.8	0.11			

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 December 2006.

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Form

ATTACHMENT, PloF!

Manufacturer: Yanmar Co., Ltd.

Engine category: Nonroad CI

EPA Engine Family: 7YDXL1.11U3N

Mfr Family Name: N/A

Process Code: New Submission

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8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930	20.3 6.0 N/A
9.Emission Control levice Per SAE J193	
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5.Fuel Rate; s/hr) @ peak or diesels onl	
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4.Fuel Rate: stroke @ peal for diesel only	G 60 60
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4.Fuel Rate: mm/stroke @ peak ((for diesel only)	71800 71800 71800 20
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3.BHP@RPM (SAE Gross)	16.871890 14.9/1800 14.9/1860
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1.Engine Code 2.Engine Model	N/A N/A
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