YANMAR CO., LTD.

EXECUTIVE ORDER U-R-028-0448-1 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.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)	
2009	9YDXN0.85P3N	0.854	Diesel	3000	
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION		
Indirect Diesel Injection			Propulsion Marine Engine		

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	EMISSION		EXHAUST (g/kW-hr)				OPACITY (%)			
POWER CLASS	STANDARD 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			5.1	1.0	0.22	·		

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).

BE IT FURTHER RESOLVED: That the listed engine models are conditionally certified pending submission of final deterioration factors on or before February 27, 2009.

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.

This Executive Order hereby cancels and replaces Executive Order U-R-028-0448 dated January 15, 2009

Executed at El Monte, California on this _______ day of March 2009.

Annette Hebert, Chief

Raphael dus novir

Mobile Source Operations Division

Engine Model Summary Template

ATTACHMENT ED#U-R-028-0448-1

	9.Emission Control	(lbs/hr)@peak torqueDevice Per SAE J1930	/D/, EM
	8.Fuel Rate:	(lbs/hr)@peak torqı	N/A
7.Fuel Rate:	mm/stroke@peak	torque	A/A
	6.Torque @ RPM	(SEA Gross)	N/A
5.Fuel Rate:	(lbs/hr) @ peak HP	(for diesels only)	10.2
4.Fuel Rate:	mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM mm/stroke@peak	(for diesel only)	17.2
	3	(SAE Gross)	23.5/3600
		z.Erigine Model	3YM20 /5
	ָרְ בְּיִבְיִיבְיִבְּיִיבְּיִרְ בְּיִבְיִיבְּיִבְּיִרְ בְּיִבְּיִבְּיִרְ בְּיִבְּיִבְּיִרְ בְּיִבְּיִבְּיִבְּי	Ligine railing (Engine Code Z.Engine Model	N/A
	مزيم المرابع	Cugine railing	9YDXN0.85P3N N/A