California Environmental Protection Agency AIR RESOURCES BOARD YANMAR CO., LTD.	EXECUTIVE ORDER U-R-028-0370 New Off-Road Compression-Ignition Engines
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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)	
2008	8YDXL0.57U2N	0.570	Diesel	3000	
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION		
Indirect Diesel Injection			Generator Set		

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	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	N/A	N/A	N/A
		CERT			6.0	1.3	0.15			

**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.

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## 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 November 2007.

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Annette Hebert, Chief Mobile Source Operations Division

## **Engine Model Summary Template**

ATTACHMENT ED #1-R-28-370

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9.Emission Control eDevice Per SAE J1931	IAI WE	EM	EM
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930	N/A	N/A	N/A
7.Fuel Rate: mm/stroke@peak torque	N/A	N/A	A/N
6.Torque @ RPM (SEA Gross)	N/A	N/A	N/A
5.Fuel Rate: (bs/hr) @ peak HP 6.Torque @ RPM (for diesels only) (SEA Gross)	7.4	6.9	6.9
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only)	18.7	17.5	17.5
3.BHP@RPM (SAE Gross)	15.2/3600	14.2/3600	14.2/3600
Engine Family 1.Engine Code 2.Engine Model	2TNV70-CHCL 15.2/3600	2TNV70-H	2CA1-H
1.Engine Code	N/A	N/A	N/A
Engine Family	8YDXL0.57U2N	8YDXL0.57U2N	8YDXL0.57U2N