EXECUTIVE ORDER U-R-028-0272 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			FUEL TYPE USEFUL LIFE (hours)					
2006	6YDXM1.11P3N	1.116	Diesel	5000				
SPECIAL	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLI					
	Indirect Diesel Inje	ction	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			E	XHAUST (g/kW-l	OPACITY (%)				
POWER	STANDARD CATEGORY		нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	N/A	N/A	N/A
		CERT		-	4.9	1.0	0.25	-		

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 2005.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form

E0#U-R-028-0272-

Manufacturer: Yanmar Co.,Ltd.

Engine category: Nonroad CI

EPA Engine Family: 6YDXM1.11P3N

Mfr Family Name: N/A

Process Code: New Submission

0					1 1 2 1	- / /	Terrory (N.			3 37 1.34	1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		<u> </u>
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930							1.(30 c) Section 9		(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	7.4	1.64	237	
	# 74 # 74							2.040.0 2.40.0				457	
S A	Σ	000 A				0							
ssic Per	Ш								Ž4	718.53			
E 93	† 			1.84							7 3 3 3		1
9.E	ል						A.64			- 1		1,240	2.7
Ω	2			4				100					
92				34			F : 00 : 1					3 1	37.
ë <u>5</u>	S0.4					May A							
ж	⋖							1.7.5.4	1.00	1			
를 A	N A A									- 144			
ت. <u>چ</u>		14.			10.00			LŽÝ					
S √s							- NY 1.7			1	lated .		
₽	15.001	133										1000	1.
~		100 m	1				1.34	153		[]		- 1	
7.Fueł Rate: mm/stroke@peak torque												100.00	100
<u>e</u> @ gg	4									151		(24)	
-uel Rat troke@ torque	N/A					1884							F.,
.F. /st o					100	\$300. 1	30.4						
~ €	20,0740; 30,000;			862		0394	2207			343			
-	7.47		2011					1350	2000	de.			
	100	1000			1000		31.4			1891	<u> </u>		
∑					26.50 kg/ 26.50 kg					1000			
6.Torque @ RPM (SEA Gross)		[####]	355	X.64		1.53	A						
@ <u>2</u>	NA			100									
ĕ₫	- 1									1.60			
<u> </u>	200			48.3				14. N	20-72	5,000			
Ö							1000		10000				
	777 Z		11000	1200744 120075 140075		100 A	1606				G57.14	0.463	
5.Fuel Rate: (lbs/hr) @ peak HP (for dlesels only)					(1)	2 X X S				10000			
9 2 .ee		2.54		303 F N			400	1400	<u> </u>		100,711.	K/M	
R Se Se	13.8		(3.22)	-0,29		14						1.0	
<u>a</u> @ <u>a</u>	2					247A.CU						27.99	
5.E							304			92.4	100		
<u>. වී</u> ත			200 E.		100						4.000		
			100		77.86		4.00	100			-40		
웊			444	17							138 H		
" ¥ €		1000											
4.Fuel Rate: stroke @ pea or diesel only	23.2												ä
el F ese	x		25,80 22,16					Vec. (4)				2.13	2
교홍현				7.22								E-31	
4 st 6		190000					34	41					
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)							. A.A.A. 1977 - A. 1987 -	1					
			1989			300	Y.	discontinued at the contract of the contract o					
Σ 🔾					13.5							4 5	
3.BHP@RPM (SAE Gross)	29.6/3600							Mr. marie administration		1000		P. 45-	
ØЭ	/3				1 .	A 1.7 4		į ·					
불빛	9.6										W	10.0	
3.E (S	Ň	!	1										
	11	14											
		100	7										
2.Engine Model	J					-							
ŏ						100							
2	22.) 3YM30							2				1	
ij.	<u>₹</u>							1					
ū	က].	
111	-3												-
	25												- !
2.1	1												
		1 1										÷	
			3 1				- 1	4					
													- 1
	A)				-			-					
	N/A							4-1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -					
1.Engine Code 2.E	N/A							4-1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -					